

**PAGES MISSING
WITHIN THE
BOOK ONLY**

UNIVERSAL
LIBRARY

OU_150276

UNIVERSAL
LIBRARY

TRACK AND FIELD ATHLETICS

A GUIDE TO ATHLETES. A MANUAL FOR COACHES
AND DIRECTORS. A TEXTBOOK FOR NORMAL
STUDENTS OF PHYSICAL TRAINING

BY

ALBERT B. WEGENER

*Author of "Horse, Parallels, and Horizontal Bar," "Graded
Calisthenic," "Recreation for Churches"*

ILLUSTRATED BY THE AUTHOR

NEW YORK
A. S. BARNES AND COMPANY

1930

Copyright, 1924, by
A. S. BARNES AND COMPANY

PREFACE

THE purpose that the author had in mind in writing this book may be briefly stated:

1. To give to athletes a brief but comprehensive course of instruction in the technic and rules of track and field athletic events.
2. To explain to coaches, athletic directors, and managers of athletic meets who have had little experience, how to conduct meets, train athletes, score, time, and other details.
3. To provide a suitable textbook on athletics for normal schools of physical training.

At present there is no single book that seeks to include the information herein given. To get this information now one must consult widely scattered literature that is not available to the average person.

Much of this material will not be new to the expert director of athletics, but there is a large and ever-increasing number of inexperienced persons who assume or have the responsibility given them of conducting athletics to whom this book will be of great help. Among these are teachers in public and private schools, social workers, young pastors, officers of athletic clubs and lodges, and missionaries of churches in foreign lands where athletic interest is rapidly growing.

It is not easy to teach the technic of any subject by means of print. Pictures are necessary, but heretofore there has been little satisfaction in the pictures found in the few books on track and field athletics now on the market. The pictures shown in those books are inadequate. They show but one position. To be of greatest value each picture should show the various positions that the athlete assumes in executing a movement. This is best shown by motion pictures. But these are expensive and no one has as yet employed them. The next best method is to use line drawings based on motion pictures, but presented on one plate. The author used this type of picture several years ago in illustrating "Gymnastic Nomenclature." It proved to be so helpful that it is used in this volume also.

The author is indebted to the books listed in the Bibliography for the sources of information for much of the matter given. Originality in subject is as little possible in a book of this kind as of any other technical work. The distinctive feature of this book is in collecting, arranging,

abbreviating, and illustrating the most important information that every coach, promoter, and athlete needs.

The author wishes to acknowledge the encouragement and advice given by Dr. Paul C. Phillips of Amherst, Dr. George Meylan of Columbia, Dr. George J. Fisher of the Boy Scouts, Dr. John Brown of the Y. M. C. A's.; and especially to W. H. Ball, Franklin H. Brown and Elmer Berry for exceptional help, detailed review, and suggestions.

CONTENTS

PREFACE	iii
CHAPTER	PAGE
I. Introduction: Value of athletics, athletics and health, advice to athletes....	I
II. The technic, rules, and equipment of running events: Sprinting, distance runs, hurdling, relay races, indoor track events.....	6
III. The technic, rules, and equipment of jumping events: Standing high jump, running high jump, standing broad jump, running broad jump, hop-step and jump.....	30
IV. The technic, rules, and equipment of weight events: Shot put, hammer throw, 56-pound-weight throw, javelin throw, discus throw.....	43
V. The technic, rules, and equipment of vaulting events: High pole vault, rope vault, fence vault, ring vault.....	55
VI. Miscellaneous indoor events: High kicking, rope climb, snap-under bar....	62
VII. General hints on training: The workout, rubdown, diet, sleep, injuries....	67
VIII. Hints to athletic promoters: Duties of a coach, how to conduct a meet, promoting athletics, general rules for officials, records, prizes.....	73
IX. Various types of track and field athletics: Tests: Contests—championships, Y. M. C. A., A. A. U., I. A. A. A. A., N. C. A. A., public schools, rural schools, classified, simplified, exponent, all-round (pentathlon, hexathlon, decathlon), handicaps, women's athletics.....	85
X. Scoring methods: 5-3-1, 5-4-3-2-1, percentage, increment percent, 1,000-point A. A. U., A. A. U. pentathlon, 1,000-point increment, team scoring..	124
XI. National administrative bodies: A. A. U., Y. M. C. A., I. A. A. A. A., N. C. A. A., N. A. A. F.....	128
XII. Historical notes.....	143
BIBLIOGRAPHY	149
INDEX	151

TRACK AND FIELD ATHLETICS

CHAPTER 1

INTRODUCTION

THE PLACE OF ATHLETIC COMPETITION

In view of the criticism that competitive athletics in general have received in the past, due to certain abuses, it is well to consider the real worth of this form of physical recreation.

Studies made by Dr. Meylan, Dr. Anderson, and others, as given elsewhere in this volume, prove that even strenuous competition in athletic sports increases the athlete's vitality, longevity, and usefulness.

The fact that athletes must live carefully and not indulge in any of the vices that others do certainly improves their health just that much more than the average person's. This would not be true if it were merely a spasmodic thing, but an athlete cannot be made in a short time. It requires years to develop a winner and those years are the most important in producing vitality. This results in long life.

The question of usefulness is not at first thought so apparent, yet is just as real. It requires a great deal of skill to perform the movements that are necessary to get the greatest results, and skill is closely associated with civilization. Awkwardness is not merely unpleasant to look at, it also shows the backwardness of a retarded age. Who has not observed the awkwardness of foreigners from lands where athletics and sports are little used? Clumsiness is certainly an economic loss in productive occupations where skill and endurance are required in quantity and quality production. Of the manual workers few unskilled laborers are good athletes. Almost always where one finds an expert sportsman among manual workers he will be found to be an artisan and a skilled workman.

The relation between athletics and scholarship in college has repeatedly been shown. Not that athletics will change an ignoramus into a scholar, but starting with apparently equal brain power the athlete will outstrip the bookworm in scholarship.

Even greater than economics and scholarship are moral values, and these, at least in part, may be produced in the young through wholesome athletic competition. Let us consider self-control. Who are the ones to "lose their nerve" and "get rattled" in unusual circumstances? The dreamers, not the men of action. Then there are perseverance, the determination to win, tenacity of purpose. No one undervalues these qualities. They are necessary to success in any occupation, yet they are directly related to athletic competition and are developed by it.

All of the above factors produce self-confidence, the natural result of ability. There are few athletes who have native ability enough to disregard the laws of health. This, then, brings us to the greatest moral influence that is found in athletics. To excel, the athlete must live right. He must be abstemious. He must deny himself vices and luxuries both large and small. He must not dissipate. He must be temperate in good things and avoid the bad. No tobacco, liquor, sex vice, irregular hours, or frazzling excitement for him. Americans in the Orient say that where athletics have been introduced, they, more than any other one factor, have been the means of getting the athletic-loving men to live right.

We are witnessing today what was true of ancient Greece, nations made through athletics. In view of these things he who helps to promote athletics of the right kind may be assured that he is a benefactor of the race.

The large place that physical training has in a real plan of education is indisputable. Its future is more secure than ever before, because it is now known that the basis of all true education is physical action. It has a sound biological foundation. We are the product of untold ages of physical action, necessary to self-preservation. We have inherited the need for action but no longer have the same urgent necessity. Our human machine has been built for action and if it does not act it will rust and deteriorate. But we have also inherited the impulse to action, and since we no longer must run to capture game for food or to avoid capture we now run for the fun there is in it. Each physical action that now is used in our play can be traced to necessity on the part of our age-long ancestry in the struggle for existence. "Play is repeating the motor habits of the past."

Thus play, of which athletic competition is a part, is as natural and necessary as eating and cannot be disregarded without loss.

Modern educators recognize this and that is the reason for such vigorous statements as this of Hutchinson: "The person who is not seen frequently playing in public should be looked upon with suspicion."

Thus athletics is no longer looked upon with suspicion nor with mere toleration, but as a vital factor in normal development. This accounts in a measure for the increase in athletic interest in the past thirty or forty years. There is now no school or college of any importance but has its athletic interest under expert management. Several states have

compulsory physical training. Most cities have public playgrounds, many of them elaborate. The athletic program reaches the small town and rural districts as well as the cities. Public and charitable institutions, social settlements, and many churches have some kind of athletics. Even institutions for the blind have athletic competition.

Still, with all the present interest, in athletics we are still behind the ancient Greeks. If ever they are to hold as high a place of respect in the future will depend upon the quality of athletics and athletic directors. If professionalism is allowed to dominate, it will again, as it has often done, overthrow athletics. The only solution for a continued sane practice is strict adherence to the definition of an amateur that has been adopted by all the leading governing bodies who have control over amateur athletics:

"An amateur sportsman is one who engages in sport solely for the pleasure and the physical, mental, or social benefits he derives therefrom and to whom sport is nothing more than an avocation."

ATHLETICS AND HEALTH

There is a mistaken notion among many people that athletes die young, due to overstrain, and that so much physical work dulls the brain.

These notions have been disproved by the following investigators:

In 1904, Dr. George Meylan of Columbia University investigated the health of 152 oarsmen who had rowed on the crews of Harvard from 1852 to 1892. The results of this study are:

One hundred and twenty-two were living in 1902. Of the dead six were killed in the Civil War.

They exceeded the "expectation of life" of the American Table of Mortality by 5.39 years.

Only two had died of heart disease and only one of consumption.

Only two considered themselves in poor health and these were then 57 and 66 years old respectively.

Only two believed that rowing had injured their health.

Ninety-four percent were free from any affections of heart, stomach, and kidneys, even eleven years after they had left college.

Thirty-seven percent had not consulted a physician in ten years.

Fifty percent had never been sick in bed a week. Thirty-seven percent of the others had been sick only once.

Eighty percent became successful business and professional men, twenty others gained national and international reputations.

Dr. Meylan draws these conclusions:

1. College athletes do not die young of heart disease and consumption as is commonly supposed.

2. The health and vigor of the oarsmen years afterward are far above the average.

3. Hard racing and training do not dull the mind and do not exhaust the mental and physical energy of oarsmen.

4. The effect is decidedly beneficial.

Dr. William G. Anderson of Yale made a study of 807 Yale athletes who had won their "Y" in either crew, track, baseball, and football between the years of 1855 and 1895. The results are:

1. Only four had died of heart disease, two of these after sixty-eight years of age.

2. The percentage of deaths among the other students of the same period was 12.9 percent, that of the athletes 7.2 per cent.

His conclusion is: "It is reasonable to say that there is no undue strain put on the athletes while they are in training. Proof is conclusive that Yale athletes do not die young and that heart disease is not the chief cause of their death as is popularly supposed."

Professor C. E. Hammet of Meadville, Pennsylvania, investigated the health of 167 former long-distance runners, with these results:

1. Only three had functional health trouble and then only after unusual exertion.

2. Ninety percent claimed to have benefited permanently.

3. One hundred and twelve broke training suddenly for business, yet only one of these was not in perfect health years later.

He concludes: "When degenerative changes do occur in former athletes the cause is to be found in either dissipation or sedentary living."

We are amply justified in stating that although it is possible for an athlete to injure himself by excess very few do so. The results of even strenuous athletics are wholesome if there are no disease conditions before the athlete starts to train. If some are injured it is due to lack of or improper training for competition.

Nearly all modern authorities on the heart are of the opinion that even strenuous, prolonged exercise does not harm the normal heart, for the muscles, lungs, and nervous system will succumb to fatigue before the heart will reach the limit of its marvelous reserve. Yet frequently going to the limit cannot be done without risk of injury.

ADVICE TO ATHLETES

Before undertaking athletic competition every aspirant to athletic honors should understand a few of the important fundamentals.

If you compete in running events get a medical examination.

Do not run distance races before twenty years of age.

Before competing take several months to build up and get into condition. Do not be impatient to get into real contests. It takes time to get into good condition.

It is absolutely necessary to observe training rules if you wish to become a good athlete. Do not be deceived by some natural athletes who

boast that they can eat, drink and smoke anything any time and who seem to get away with it for a while. The brilliant but careless athlete will certainly be defeated in time by the careful plodder. You will surely become an athletic "dud" if you neglect training.

Be persistent. Do not get the idea that because you may be handicapped that you cannot become an athlete. Remember W. B. Page who thirty years ago held the high jump record for years at 6 feet 4 inches. He had an accident in his youth that caused his legs to become imperfect. He was advised when he was fourteen to practice jumping to strengthen them. He not only developed perfect legs but became the champion. Several one legged athletes have made creditable performances in several events.

Above all, be a good sport. There are certain bad habits practiced by some athletes that "show them up" and are a menace to true athletics. No high-minded athlete will do them.

Good sportsmanship has to do with your character, your relation to the officials, and to your opponents.

A good sport will compete for pure love of competition rather than for prizes, pride, or excessive desire to win. He will accept no unjust advantage. He will be modest in victory, not boasting or gloating or responding to applause. He will be a good loser, willingly acknowledging defeat, not making explanations as to why or how he lost through ill luck or not feeling well, etc. He will show good endurance as the result of proper training and not collapse or have to be supported at the end of a race or otherwise show a "yellow streak." He will carefully learn the rules and obey them. He will learn and practice the difference between laudable strategy and ignoble trickery or dishonesty; which in track and field athletics means that he will be honest in filling out blanks, not take a long time to get on the mark, not attempt to beat the pistol, not run out of lanes nor shoulder opponents nor cut across their path nor "pocket" them, nor trail a leg beside a hurdle or knock them down intentionally. He will treat opponents as guests rather than enemies, give them a fair deal, willing to give them the shade of a doubt, commend their good performances, and be gentlemanly even though they are not. He will treat officials as honest in intention, abide by their decisions, not kick, not expect perfection of them.

In brief, he will both have and give a good time.

You will miss the whole of athletics if you do not observe these principles in letter and in spirit.

CHAPTER II

THE TECHNIC OF ATHLETIC EVENTS

TRACK (RUNNING) EVENTS

Sprints

Sprints, or dashes, are short races up to and including a quarter mile (440 yards) run at top speed all the way. Sprints are perhaps the most popular of athletic events and success depends mostly upon nerve reaction, since athletes of all sizes and build are among record holders.

It is customary for from four to six athletes to run at a time, the first four belonging to the first "heat," the second four to the second heat, and so on, until all have run. Then the first two of each heat run additional heats, called "semi-finals," after which the first and second of the semi-finals run in the final heat. Before the meet the Games Committee draws the runners' names by lot to determine which ones are to be in each heat. These positions are published on the program and cannot be altered even though only one man appears to run in a heat.

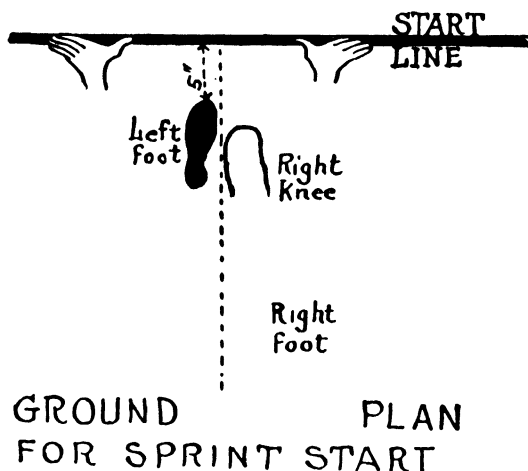
The Starter oversees the drawing for the places on the track and the Clerk lines them up.

The runners then dig holes in the track for their feet, the holes being 3 or 4 inches deep with a firm perpendicular back wall. The front hole is dug for the left foot from 4 to 6 inches back of the starting line (sometimes called "scratch"). The rear hole for the right foot is dug a little to the right and far enough back so that when in a kneeling position the right knee comes almost to the front hole. The slant is about 45 degrees. The right knee should be opposite the ball of the left foot.

At the Starter's command, "Get ready," or "On your marks," place your left foot in the front hole, kneel on the right knee, place the right toe in the rear hole, place the hands on the mark in an arched position with the two spans distance between the thumbs. Weight is on the rear knee, muscles are relaxed. This is called the "crouch start" and is used by all good runners.

At the Starter's command "Set" or "Get set," raise the right knee 6 inches, so that the lower leg is horizontal. Incline the weight forward on the hands and left leg, arms straight. Note that the shoulders are forward of the mark. Do not "crane the neck," but hold the head natural, eyes on the track about 20 feet ahead. Contract all the muscles for the spring and hold a steady position. Hold the breath. Do not "break"

(start before the pistol is fired). This is a bad habit of novices, and is costly, since the Starter will place you back for each offense.



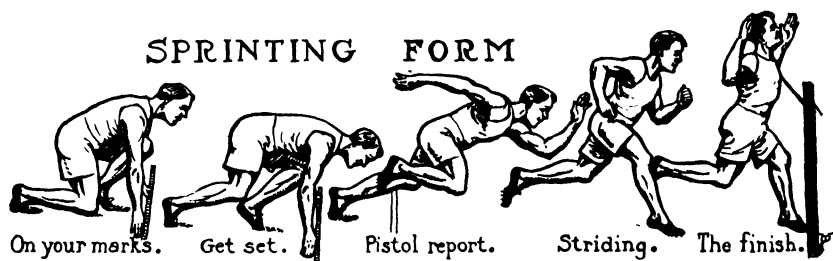
At the report of the pistol spring forward, not upward, from both feet and hands, taking a short, quick jab step with the right foot a few inches ahead of the mark and a little to right. At the same time jerk the left arm forward and the right backward and up, both bent. The weight must be well forward and low, the upright position being gradually assumed at about the sixth or seventh stride.

During the run hold the head naturally, the body forward and arched. Hold the arms half bent and use them directly forward and backward, the action being all in the shoulder and none in the elbow. The hands should not cross the median line of the chest at end of front swing. Move the legs directly forward and do not allow the foot and knee to turn outward. Take long, fast strides on the balls of the feet. When the foot strikes the ground in front the leg should be bent as little as possible; do not elevate the foot high in the rear. Never look around to see where the others are, but fix your eyes on the finish and your whole attention on your utmost effort. When about 20 yards from the finish get a feel-

ing of fright as though running from danger. It will help you make a strong finish.

It is not possible for all runners to run at top speed in the quarter mile. Those who have little endurance should try to, but those who have great endurance may start a little slower and make a fast finish.

Never jump at the "tape" (finish yarn), but just before reaching it throw the arms forward up and half bent, chest forward and turned a



little to one side. Do not slow up until several yards past the mark and then do it gradually.

Just before getting on the mark spend two minutes in deep breathing. At the command "Set" take a rather deep breath and hold it. At the pistol report suddenly eject the air and at the second stride take a quick deep breath through the mouth and hold it. In runs up to 50 yards do not take another breath. In other distances do not use up all the air



in the lungs before inhaling again. In the 100-yard dash take a short breath at 50 yards and another at 75 yards.

Training Hints

Spend plenty of time practicing the start and learn to hold the "set" position on the mark; also work on striding. Become familiar with starting from the pistol report. After two or three weeks' preliminary exercise follow a daily schedule something like the following, if you are trying to get in condition for a 100-yard dash.

Monday—Four or five starts. Jog 220 yards with attention to stride and reach of the legs. Run 50 yards at top speed.

Tuesday—Starts as above. Jog 440 yards. Run 100 yards at about three-quarter speed.

Wednesday—Starts. Top speed 50 yards. Rest. Jog 220 yards, 75 yards at top speed.

Thursday—Starts. Jog 440 yards. Rest. Fast 150 yards, but not at top speed.

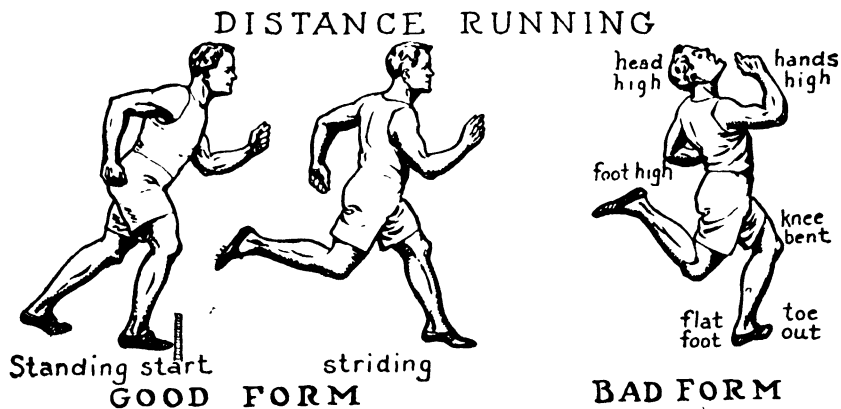
Friday—Starts. Jog 100 yards, 50 yards at top speed. Rest. 100 yards at top speed.

Saturday—Jog 220 yards. Rest. Three starts. Fast 75 yards.

Rest two or three days before a meet but take a daily rub, kneading, and muscle stretching. Keep the muscles warm and if the weather is cool, wear a heavy robe and take slow preliminary warming-up work.

DISTANCE RUNNING

Distance runs are those of a half mile or more. Runs around the half-mile mark are sometimes called "middle distance" and those of a



mile and more "long distance," but they are here considered together because they require about the same qualities. Lithe and long-legged runners are best adapted to distance running. The erect start is used instead of the crouch. This is done by toeing the scratch with one foot, the other being back one pace. There is no advantage in getting a quick start. Since the run is slow the chest and head are held erect, the arms swing rather wide forward and backward and a little bent. Some trainers have their distance runners swing their arms in continuous forward small circles that look like a "side-wheel" action. All of the muscles should be held as relaxed as possible. Except in runs of five miles and more, run with the heels off the ground. In the longer distances it is necessary to vary this occasionally to relieve the leg muscles.

Special attention should be given to "striding." A long, regular stride is important. The front knee should be straight as the foot strikes the ground and that of the rear leg bent only moderately. The leg should not be swung forward stiffly, but should be allowed loose free-joint play. Of course it is possible to overstride, and each runner must learn for himself the longest stride that he can maintain with the greatest ease.

An equally important matter is "pacing" (maintaining the same speed throughout or for long stretches). Set the time in which you wish to run the distance and do your pacing with a watch so as to time each quarter, but be sure to have enough endurance left to finish with a dash of 100 yards or more. Do not worry if an inexperienced runner passes you in the first part of the race and do not allow him to pull you into a faster pace. Almost always such runners drop out or fall far behind before the finish. Do not "set the pace" (take the lead) all the time unless your regular pace brings you far ahead of the others. If during the last part of a race a better runner passes you try to follow close behind if you are feeling well.

It requires years of regular practice to become a good distance runner and no one should attempt to run even a middle-distance race without at least a month of careful training. Longer distances require more time. Coaches in small schools and clubs often beg members to go into a race "to fill out," even when they have had no training, but this should never be done in distance runs. Before starting to train for long runs get a medical examination and occasionally thereafter. No growing boy should train for long races. Jogging gradually up to a mile or two is good practice, but not for boys below fifteen or sixteen. Regular and good habits are necessary, as well as a good digestion, plenty of common food, and a careful watching of the weight.

Proper footwear is important. A soft, light, laced shoe with firm but flexible sole and low heel, snug-fitting, but not tight, with light woolen socks should be worn. Rub the feet daily with alcohol and if they become sore rest until they are well. Bathing in alum water is good for excessive perspiration. On cinder tracks spiked shoes may be worn, but never on hard tracks or roads. Breathe through the nose as long as it is comfortable, but do not hesitate to breathe through the mouth if the nose breathing is not free and comfortable. You will need all the air you can get, so get it any way you can. In either case both inhalations and exhalations should be well controlled.

TRAINING SCHEDULE

Preliminary Work for the Half-Mile Run

When first starting to train for a half-mile run, jog a half mile every day for two weeks. Every other day run another half after a fifteen minutes' rest, then adopt a weekly schedule something like the following:

Monday—Jog three-quarters of a mile.

Tuesday—Run 600 yards in fair time. Rest. Then do two 50-yard sprints.

Wednesday—Run a mile at an easy gait.

Thursday—Run a half mile at a comfortable gait.

Friday—Practice sprinting altogether (half dozen).

Saturday—A half mile at a good gait.

Schedule for the Mile Run

Monday—Three or four short dashes. Run a mile with a good pace for the first 100 yards.

Tuesday—Half a mile at good gait. Rest, then jog a half mile, sprinting the last 50 yards.

Wednesday—A little short sprinting. Rest, then jog a half mile, giving attention to form.

Thursday—Fast 600 yards. Rest, then jog a mile; sprint the last 50 yards.

Friday—Short dashes. A mile at fair speed and sprint the last 100 yards.

Saturday—A mile at almost the best gait. In racing, run the first quarter fast, slow down in the second and third, speed on last, and sprint to finish. Jog to get the inside of the track, called "the pole."

Practice only three times a week for two-mile runs. Run an even pace and occasionally run a fast mile.

For ten-mile runs practice at four and five miles, and once a week at ten miles.

On alternate days practice a little light work, and massage. If weak, stop the practice and if not feeling well rest until you are better. Occasionally run more than ten miles. In a race the first half mile should be fast, but after that keep a steady pace.

GENERAL RULES FOR TRACK EVENTS

Track Measurement

All runs around a track shall be measured 12 inches outward from the inner edge of the track.

In straight-away runs the distance shall be measured directly from start to finish.

There must a border on a curved track made of board, cement, rope, or other suitable material.

In permanent indoor tracks, such as are found in gymnasiums, the measurement is made at the middle.

Direction of Running

The direction of running shall be with the left hand inside.

In all championship races at any distance up to 220 yards outdoors, 300 yards indoors, each competitor shall have a separate course (at least 3 feet) properly marked with white-wash lines two inches wide, whether the race be run on a straight path or around one or more curves.

Heats

In case that there are so many runners in sprints (runs up to 440 yards) that they cannot all run at the same time they are arranged to run in "heats" (4, 5, or 6 at a time).

The Games Committee draws lots for the different heats the day before the meet in all but A. A. U. and I. A. A. A. meets, where it is done by the Referee. The names are published on the program and cannot be changed, except when only enough runners appear to fill one heat the Referee shall have them run in one heat.

The first and second in each heat are allowed to run in the semi-finals and the first and second in the semi-finals run in the final heat. In this way the poorer runners are eliminated in the preliminary and semi-final heats and the best are in the final.

Clerk of the Course

The Clerk of the Course shall be provided with the names and the numbers of all entered competitors, and he shall notify them to appear at the starting line before the start in each event in which they are entered. In N. C. A. A. meets this must be done at least five minutes before, and he is responsible for getting the competitors at the proper time. In A. A. U. and I. A. A. A. A. meets he merely records the names of all who appear and with the Referee's help arranges the heats.

In case of handicap events from marks, he shall place each competitor behind his proper mark; shall immediately notify the Starter should any competitor attempt to advance himself after the Starter has warned them to "get ready"; and in time-allowance handicaps shall furnish the Starter with the number and time allowance of each actual competitor. He shall control his assistants, and assign to them such duties as he may deem proper. In all track competitions run in lanes the choice of lanes shall be drawn for in each heat; in all other track competitions the positions shall be numbered from the curb or pole and shall be drawn for according to clubs in scratch events, and in handicap events the competitors shall be allotted their positions by the Clerk of the Course.

Inspectors

It shall be the duty of an Inspector to stand at such point as the Referee may designate, to watch the competition closely, and in case of a claim of foul or violation of rules by a competitor or other person to report to the Referee what he saw of the incident.

Such Inspectors are assistants to the Referee, to whom they shall report, and have no power to make any decisions.

The Starter

The Starter shall have entire control of the competitors after the Clerk of the Course has placed them on their marks, and he alone shall

decide if a man has gone over the mark in a false start. All races shall be started by the report of a pistol except that in time handicap races the word "go" shall be used. The A. A. U., I. A. A. A. and N. C. A. A. rules specify that he must first direct the runners to "get on the mark" and then to "get set" before discharging the pistol.

All questions concerning the start shall be decided by the Starter.

When any part of the body of the competitor shall touch the ground in front of his mark before the starting signal is given, it shall be considered a false start.

If, in the opinion of the Starter, a false start has been made, he can recall the competitors by a second pistol shot, and penalize the offender or the offenders.

In hurdle races no penalty shall be imposed for the first false start, but the offender shall be disqualified on the second false start.

For all other races up to and including 50 yards, the competitor shall be put back one foot for the first attempt and one foot for the second attempt; in races over 50 yards and including 75 yards, 2 feet; in races over 75 yards and including 125 yards, one yard; in races over 125 yards and including 300 yards, 2 yards; in races over 300 yards, 3 yards (I. A. A. A. and N. C. A. A. rules require only one yard set back for all outdoor races for each of the two faults and one foot for indoor races). In all cases the third false start shall disqualify the competitor from the event. In relay races the penalty shall be according to the distance the offender is to run in the race.

The Starter shall also rule out of an event any competitor who attempts to advance himself from his mark, as prescribed in the official program, after the Starter has given the warning to "get ready."

The Starter must have at least two good cartridges in his pistol before starting a heat.

The Course

Each competitor shall keep in his respective position from start to finish in all races on straight-away tracks. On races with tracks of one or more turns, he shall not cross in front of a competitor until he is two yards in advance of his nearest competitor. In championship races of 300 yards and under each competitor shall have a separate course (at least 3 feet) properly marked and measured.

The Competition

Any competitor wilfully jostling, or running across, or obstructing another competitor so as to impede his progress, or competing to lose or to coach another competitor, either in a trial or final contest, shall forfeit

his right to be in the competition and shall not be awarded any position or prize to which he would otherwise have been entitled.

No competitor, after leaving the track, shall be allowed to rejoin a race either for the purpose of gaining a place or to pace or assist another competitor.

When, in any but the final heat of a race, a claim of foul or interference is made, the Referee shall have the power to disqualify the competitor who was at fault, if he considers the foul intentional or due to culpable carelessness, and shall also have the power to allow the hindered competitor to start in the next round of heats, just as if he had been placed in his trial.

When, in a final heat, a claim of foul or interference is made, the Referee shall have the power to disqualify the competitor who was at fault, if he considers the foul intentional or due to culpable carelessness, and he shall also have the power to order a new race between such of the competitors as he thinks entitled to such a privilege.

The Referee has power to disqualify a runner who competes to lose or coach another runner, or otherwise impedes another or for ungentlemanly conduct, or offense to officials, spectators, or contestants.

The Finish

The finish line shall be a line on the ground drawn across the track from finish post to finish post and the men shall be placed in the order in which any part of their bodies (i.e., "torso," as distinguished from the head, arms, feet, or hands) crosses such line. College rules say "breasted.")

For the purpose of aiding the judges, but not as a finish line, there shall be stretched across the track at the finish, 4 feet (1.22 meters) above the ground, a worsted string which shall not be held by the judges, but fastened to the finish post at either side, so it will always be at right angles to the course and parallel to the ground.

No competitor shall be considered to have finished unless his entire body shall have crossed the finish line.

Judges at Finish

There shall be four or more Judges at Finish, who shall decide the order in which the competitors finish in the competition. In case of a disagreement, the majority shall decide. Their decision as to the order in which the men finish shall be final and without appeal. (College rules state that two shall stand at one end of tape and three at the other. Each one is assigned to watch first, second, etc.)

Judge of Walking

The Judge of Walking shall have sole power to determine the fairness or unfairness of walking, and his rulings thereon shall be final and without appeal. He shall caution any competitor whenever walking unfairly, the third caution to disqualify, except that he shall immediately disqualify any competitor when walking unfairly during the last 220 yards of a race. He shall control his assistants, and assign to them such of his duties as he may deem proper.

Timekeepers

Each of the three Timekeepers shall time every event. In case two of their watches agree, and the third disagrees, the time marked by the two shall be official time. If all watches disagree, the time marked by the watch giving the middle time shall be the official time. Time shall be taken from the flash of the pistol.

Should assistants to the Timekeepers be provided, they shall perform like duties, but the time recorded by their watches shall only be accepted in the event of one or more of the watches held by the Timekeepers failing to mark the time, in which case they shall be called upon in such order as may be previously decided upon, so that on all races, where possible, three watches shall record the time.

If, for any reason, only two watches record the time of an event and they fail to agree, the longest time of the two shall be accepted as the official time.

No records are allowed by the governing bodies unless three watches catch the time. They need not agree, however. College rules add that watches shall be tested by an expert watchmaker shortly before the race.

Ties in Track Events

When there is a tie in a running event it is often called a "dead heat." In case of a tie, the contestants are not allowed to divide the prize, nor toss for it, but must compete again at a time and place appointed by the Referee.

In handicap meets the prize in a tie is given to the runner who received the least handicap. If the tie is between two or more who have the *same* handicap it is decided as in a scratch event. N. C. A. A. rules state that in case of tie where points count, the points shall be equally divided and prizes awarded by lot. I. A. A. A. rules require that in annual championship meets medals in ties shall be split, half one metal half other. If three tie for place the medals shall be one-third each of gold, silver, bronze.

TRACKS

Construction and Equipment

The best outdoor running track is a quarter mile around and 18 or 20 feet wide with a straight-away along one side long enough to run 220 yards. If this is impossible there should be at least a 100 yards straight-away.

The surface of the track will depend upon whether it is for spiked or unspiked shoes. If no spikes are worn the best track is a smooth well-rolled dirt surface. In fact this is the most serviceable all-round track for ordinary use.

If spikes are to be allowed, as in all of the big meets, then an expensive cinder track must be made. Finely sifted cinders mixed with clay makes the best top dressing. A track made entirely of cinders is worthless. An all-clay track is better, but is not so good as cinders and clay mixed. For spikes the track must be smooth and springy, yet firm.

If there is plenty of money to spend on a track it should be made as follows: Dig the soil away a foot deep, then throw in four inches of small stones or coarse gravel, then four inches of clinkers and loam, then a few inches of coarse cinders, and finally a top dressing of finely sifted cinders and clay mixed, or of burnt brick-dust and clay mixed, then roll.

A less expensive but serviceable track is: Level the ground, then put on two or three inches of coarse cinders and roll, then three inches of fine cinders and clay mixed and roll.

Drainage should be had by a grade of 4 inches to 20 feet for the straight sides, and the ends banked 2 feet to the outside.

The curb is made of $1\frac{1}{2}$ by 6-inch boards set on edge 3 inches above ground. On the curve they should be sawed and bent to follow the curve.

The track is drained by a 4-inch drain laid at the curb.

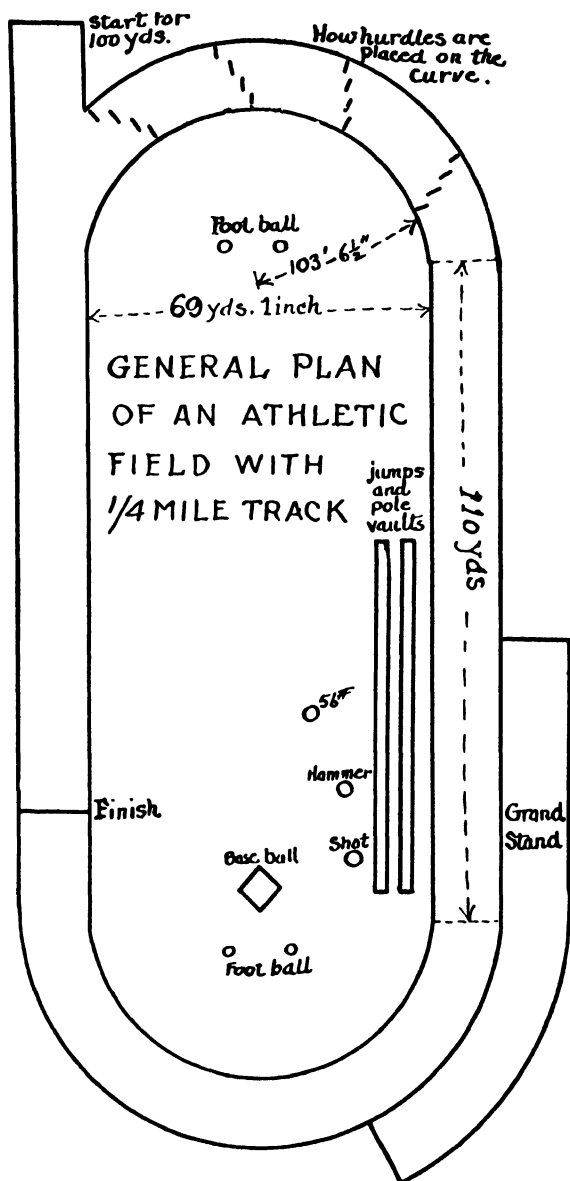
The measurements for laying out a quarter-mile track are: The straight sides are 110 yards long, 69 yards one inch apart from curb to curb. The semicircles at the ends have a radius of 103 feet $6\frac{1}{2}$ inches to the curb.

In measuring distances on a track the measurement must be made 12 inches outward from the curb.

In caring for the track it should be brushed often with coarse brooms, or a mat dragged over it, and then rolled. This had best be done in the evening so that the sun will not harden it. Watch for uneven spots and have some fine cinders to put on and roll. Loose spots should have a mixture of cinders and clay.

The lanes to be used in sprinting should be made of strong white cord such as carpenters use for lining. These are stretched from start to finish, allowing at least 3 feet between cords. They are held in place by

iron rods 2 feet long, pointed at the lower end and having a spiral loop at the top to hold the cord. In the 440-yard dash, which must be run



around the track, the lanes are placed only at the finish and each runner must take his own lane.

The Outdoor Field

The entire field inside the track should have a fall of 5 inches to 100 feet. A trench should be dug in the field just inside the curb of the track. This should be 18 inches wide. Four-inch farm drains are laid in these with a catch basin every 250 feet. Fill with broken stones and cover with sod face down, or straw, to prevent small stones from choking it. Then fill with earth.

The grandstand should be on the opposite side of the straight-away finish line. The first row of seats should be at least 6 feet above ground, the press stand to be at the finish and not in the grandstand. Locker rooms and baths can be built under the grandstand.

Time Devices

Little improvement has been made in timing methods since the beginning of organized athletics. The chronometer ("stop watch") then in use is still used. These are made to register to $1/5$ and $1/10$ of a second, the latter preferred. Others have two split-second hands by means of which one watch may be used to time two runners.

The best of timing depends, however, too much upon the time reaction of both runner and timer so that it is impossible to get absolute time. They try to overcome this by requiring three timers, all of whom take the time of the first runner only. Thus the second, third, and fourth have absolutely no way of knowing their time, and where several heats are run there is no absolute way to tell what runners are entitled to a place in the semi-final and final heats, since the third in a fast heat may be better than a second in a slow one; but he is eliminated because the rules say that the first two in each heat run in the semi-finals and those of that run in the finals.

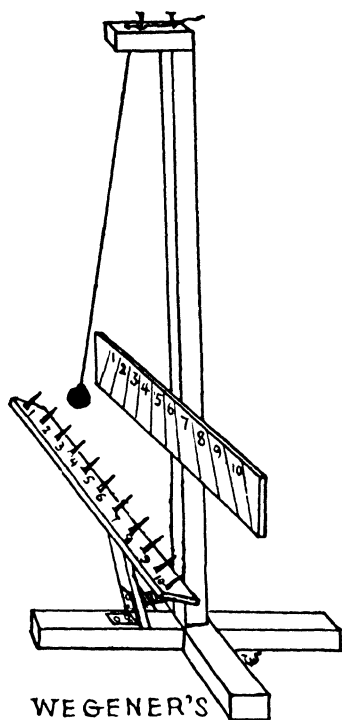
Recognizing these deficiencies some men have experimented with automatic, electrically controlled devices, but as yet they have not proved a complete success.

An Improvised Timing Device

A satisfactory chronometer is expensive and also has a delicate mechanism that requires careful handling. Repairs are expensive, so that in small clubs it is often difficult to get even one timer. Such clubs will welcome a statement of a simple device that was published in *The Youths' Companion* that can at least be used for practice sprinting. It is not suited for long races.

"Make a pendulum of a ball of lead weighing a pound. Attach to it a strong thin line, such as a fine fish line. Suspend this from a bar placed horizontal. It must be inserted in a hole bored in the bar and then plugged in tight so that where it enters the bar it measures exactly 39.1 inches to the center of the lead ball. (The length of the pendulum

varies slightly with the latitude but 39.1 will do for any place in U. S.) The timer holds the ball about 15 degrees from the vertical and as the runner starts he lets it drop without the slightest push. He then counts the seconds as the pendulum swings to and fro and by noting the angle of the line when the runner crosses the finish he is able not only to note the seconds but also the fractions of a second. It is necessary to provide a wind shield if the wind is blowing." It is possible to get tenths of a



WEGENER'S
PENDULUM TIMER
FOR SPRINTS

second by dividing the arc through which the pendulum swings into ten equal spaces. A wooden arc with clamp jaws of this kind is easily constructed, with nails driven so that when the jaws are released the line that holds the pendulum will catch on a nail. (The author has made this improved device and it works well.)

HURDLE RACES

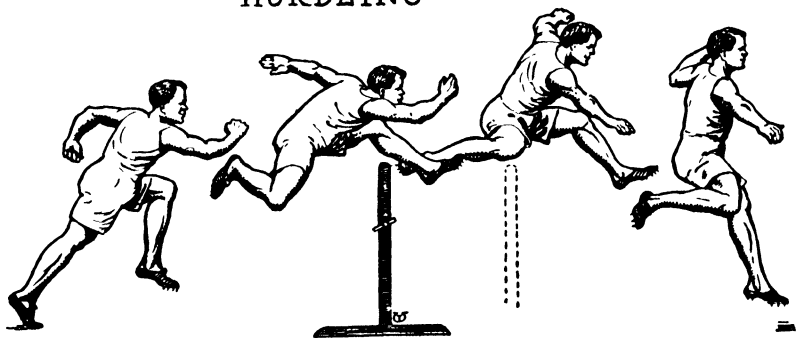
Hurdles are light obstacles placed at regular intervals on the track over which the runners must leap during the race. The standard distances, heights, and number of hurdles are as follows:

In the 120-yard hurdle race, each hurdle is three feet, 6 inches high and placed 10 yards apart, with the first hurdle 15 yards distant from the starting point, and the last hurdle 15 yards before the finishing line. In the 220-yard hurdle race 10 hurdles are used; each hurdle is 2 feet, 6 inches high. They are placed 20 yards apart, with the first hurdle 20 yards distant from the starting mark, and the last hurdle 20 yards before the finishing line.

In the 440-yard hurdle race 10 hurdles are used, each hurdle being 3 feet in height. The first hurdle is placed 40 yards from the scratch mark; the remaining hurdles are placed 40 yards apart, and the distance from the last hurdle to the finishing line is 40 yards.

In the 110-meter hurdle race there are 10 hurdles, each hurdle 1.06 meters (3 feet 6 inches) high. The distance from the scratch mark to the first hurdle is 13.72 meters (15 yards); the remaining hurdles are placed 9.14 meters (10 yards) apart, and the distance from the last hurdle to the winning post is 14.02 meters (46 feet).

HURDLING



In the 400-meter hurdle race, there are 10 flights of hurdles, each hurdle being 3 feet in height. The first hurdle is placed 45 meters (49.213 yards) from the scratch mark, the remaining hurdles are placed 35 meters (38.277 yards) apart and the distance from the last hurdle to the winning post is 40 meters (43.745 yards).

In the hurdle races of other distances, and with different numbers of hurdles, the hurdles should be placed at intervals as in the 120 yards, 220 yards, and 440 yards toward which the distances approach. (e.g., 70-yard hurdles as the 120-yard.)

Since hurdling is merely modified sprinting, the rules of sprinting apply to it, except for those distinctive features, "taking the hurdle" (leaping over) and striding.

The crouch start is the one used. In practice the preliminary run to the first hurdle must be accurately taken, so that there is no difficulty in making the leap. There are eight strides to the first hurdle in the 120-

yard event and ten or eleven in the 220. A take-off line should be marked on the track about 8 feet in front of the first hurdle, which the jumping foot must meet. Another mark should be made six or eight strides from the take-off line, which must also be stepped upon by the jumping foot. Some hurdlers find it necessary to start from the mark with the uncus-tomary leg forward so as to bring the stride out right, but as a rule the leaping foot is on the scratch mark.

In leaping over the hurdles always spring from the same foot. Bring the front foot well up forward, with the knee bent somewhat toward the chest but not turned outward. Bend the trunk forward upon the forward thigh. After the leap turn and bend the jumping leg horizontally out-ward and bring it forward steadily without a jerk, so as to be ready to stride when the forward foot strikes the ground. The arms are spread. Do not soar high, but get to the ground as quickly as possible. Do not twist the trunk, but keep faced to the front. The two worst faults of beginners are jumping too high and suddenly jerking the rear leg forward.

In the 120-yard hurdles (called the high hurdles) tall men make the best records, since they can best make the three strides between hurdles. In the 220-yard hurdles tall men take seven strides between hurdles and short ones nine. In longer distances there is no standard. To avoid soaring too high suspend a rope or bar horizontally $6\frac{1}{2}$ feet above a hurdle in practice. Also use padded hurdles.

Rules

In making a record it is necessary for the competitor to jump over every hurdle in its proper position, and no record is allowed unless all the hurdles remain standing after the competitor clears them. A com-petitor knocking down three or more hurdles in a race, or any portion of a hurdle, runs around, or trails leg alongside, is disqualified. In any championship race up to and including 300 yards, each competitor must have separate hurdles and a separate course marked out and measured independently, whether races are run straight-away or with turns.

Training Hints

Before starting regular hurdle practice, become hardened by several weeks of preliminary sprinting, jumping, and distance jogging as in training for sprinting. The daily schedule of practice work should be about as follows:

Monday—Take three starts. Set up two hurdles at proper distances and “take them” at top speed. Rest. Sprint 100 yards at fair speed. Rest. Jog a half mile.

Tuesday—Three starts. Take six or seven hurdles at fair speed. Rest. Take three hurdles at top speed. Jog a half mile.

Wednesday—Three starts. Take six or seven hurdles at fair speed. Rest. Take three hurdles at top speed. Jog a half mile.

Thursday—Three starts. Two hurdles three or four times. Run full distance at moderate speed. Rest. Jog a half mile.

Friday—Three starts. Run 220 yards at fair speed. Rest. Four hurdles at top speed. Jog a half mile.

Saturday—Three starts. Jog a quarter mile. Rest. Take the entire distance at top speed.

In training for longer hurdle races follow about the same schedule but increase the distances for the sprints and jogs.

Hurdle Construction

A hurdle shall consist of two wood uprights, or standards, supporting a rectangular wood frame or gate. The hurdle may be adjustable in height, but shall be rigidly fastened at the required height for each event.

The extreme width of the gate shall be not less than 4 feet (1.22 meters). The extreme length of base for the uprights shall be not less than 19.685 inches (500 millimeters).

The total weight of the hurdle shall be not less than 15.43 pounds (7 kilograms).

The top bar of the hurdle shall be painted white.

RELAY RACES

Relay races are those in which several runners, usually four, constitute a team, who run in succession over the required distance, each running an equal distance or otherwise as previously agreed upon, and passing a stick from one to the other. The standard races for big athletic meets are:

1. One mile (each one runs a quarter).

2. Mixed. (The first runs a quarter, the second 220 yards, the third a half mile, and the last one mile.)

Other distances may be selected to suit local conditions. (The 440-yard, 880-yard, 2-mile, and 4-mile relays are sometimes used.) A popular race is to have teams of ten or more, each of whom runs 100 yards, or one lap (around) on a small track. This is an easy and safe way to pit small schools and clubs against each other.

Relay races are sprints and the technic of sprinting applies, except that the first runner is the only one of the team to take the crouch start.

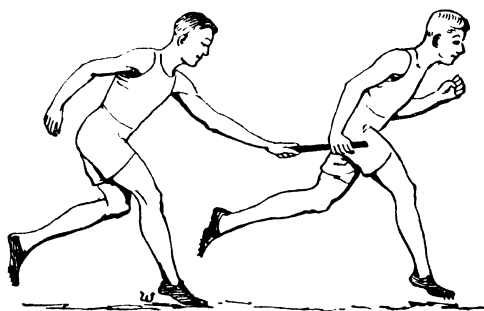
The only distinctive feature is the "touch-off" (touching the next runner or passing the stick to him). Each waiting runner takes his place near the back line of his starting zone and looks back at the approaching runner. When the oncoming runner is within five or six yards the next runner faces forward and starts to run, holding his right hand extended back to receive the baton (stick) from the left hand of the on-

comer. The distance and speed should be so timed that the transfer is made in the starting zone, each runner being at top speed.

A line drawn 10 yards on each side of the starting line of each relay is known as the starting zone. Within this zone each runner must pass the baton to the succeeding runner. No member of a relay team can run outside of such zone in order to relieve his teammate. The baton (stick) must be passed (not thrown or dropped) by a competitor and grasped by the one succeeding him. Violation of any of these rules by any competitor disqualifies the team. No man can run two relays in any one team. The composition of a team cannot be changed after a trial heat has been run.

No change can be made in the order of running, except in relay races in which each competitor runs the same distance.

The position of the teams must be drawn by lot.



Passing the stick in the relay race

In all relay races an announcement must be made as to the distance each competitor is to run in his relay. Any runner failing to run the required distance causes his team to be disqualified.

In handicap relays the runner of the first relay is allowed the total handicap of each team.

Training Hints

Since relay races are sprints the training for each runner should be that of sprinting. Otherwise the only important distinctive feature for the team to practice is passing the baton. Three or four trials a day at passing the baton should be made. In this it is not necessary for the team to run the entire distance but only a short distance near the touch-off area. Top speed and accuracy in passing are the essentials to acquire.

In a race the best runner runs last, the next best first, the third best runs second. Except that it is best to start with a very nervous runner

or a big strong one. A poor pace keeper should be matched even with an opponent.

Keep the regular training pace even though the opponent is ahead, except in long relays catch up and let him pace you.

To transfer the stick (baton) the passer extends it with his left hand (stick perpendicular). It is the duty of the receiver to grasp it since the passer is tired and unsteady. The new runner at once passes it to his left hand.

After finishing the run keep a straight course ahead so as not to cut across oncoming runners.

Relay Baton Specifications

The baton shall be a hollow wood tube not more than 11.81 inches long. The weight shall be not less than 1.764 ounces. The circumference shall be 4.724 inches.

INDOOR TRACK EVENTS

Indoor athletic events are quite as popular as outdoor events, and have the advantage in large cities of being more easily promoted in gymnasiums, large halls, and armories, and of not being subject to the weather. With certain modifications most of the outdoor events can be conducted indoors.

Among the most popular indoor running events are the sprints. These are run either on the main floor or on an elevated track. If run on the main floor the distance is limited by the length of the room. Nothing below 25 yards is considered satisfactory for "straight-away" running.

When a circular track is used any distance may be run; but contestants cannot, in most places, start side by side on the same mark, on account of the narrowness of the track. For that reason the contestants must run either singly or two may start so as to finish directly on opposite sides of the track, thus allowing the judges to sight across and determine the winner. The most popular arrangement is to have four runners start and finish from separate marks a quarter distance around the track, each runner being timed by a set of watches. This is as close to a real sprint as can be run on a narrow gymnasium track. These limitations do not apply to indoor meets in large armories etc., where the track is built large enough for side by side running as outdoors.

None of these methods is without objection for narrow track sprinting, and for that reason they are never used in important meets. In such meets the sprints are limited to the straight-away on the main floor and nothing less than a half mile is scheduled on the narrow track. But the other methods may be used with profit in closed meets and where absolute conditions are not demanded.

For straight-away sprinting on the main floor there is no difference

from outdoor sprints, but for narrow track sprinting the start and "taking the curve" must receive special notice. Toe-blocks cannot be used on such a track. Thus the runner is allowed to brace his rear foot against the foot of another person at the start. In running around the banked curve a sprinter will make the best time by running up high on the outer edge and inclining the weight well in toward the rail.

In track events of a half mile or more the contestants start together at or near the same mark, except of course in handicap races. Such races on a narrow track are not always satisfactory because it is almost impossible to pass a runner in the lead without fouling. The only way that this difficulty can be lessened is to insist that the "runner up" must take the outside and the runner ahead keep the inside of the track on the "straight-away" part, and allow no passing on the curve.

Indoor hurdling is not satisfactory. It should never be attempted on the narrow elevated track usually constructed in gymnasiums. Indoor hurdling, whenever it is scheduled, is always run as a straight-away on the main floor like the sprints. It is seldom possible to have more than two hurdles at the regular distances. It is, of course, possible to place the hurdles about 6 yards apart and use a single stride between hurdles, thus using more hurdles.

RELAY RACES IN THE GYMNASIUM

Indoor relays, like all other sprints, are never run side by side on a track like outdoor relays, unless run in an exceptionally large room with at least a 220-yard track wide enough for that purpose. Relay races may be run on the regular gymnasium track, but only two teams can run at a time, and these must start from opposite sides of the track. Such races are popular and should be scheduled in all indoor meets. They are usually made short—one or two laps for each man—because the winning team must run repeatedly. Uprights should be erected on each side of the track opposite the center across which the judges sight on the finish. All runners should line up on the inside of the track so as not to interfere with the other team as they pass.

The Starter should stand at the end of the gymnasium rather than near one of the teams. One judge should be stationed on each side of the track races, but because fouls are almost unavoidable it has been found better to allow no passing. Such races are popular as a feature of regular gymnasium class work in which there are many on each team.

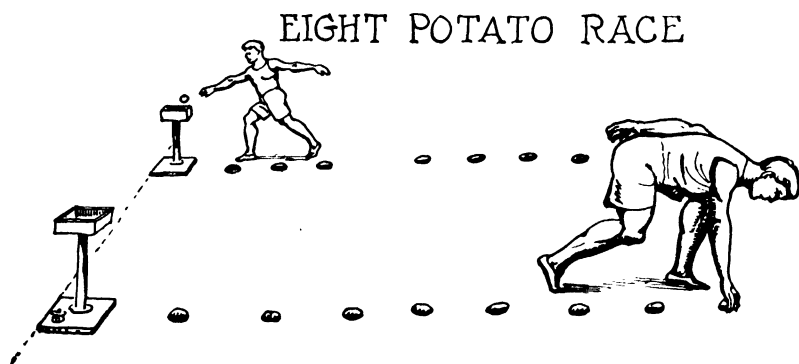
Novelty relays are not used in serious meets but are popular as diversions at gymnasium class periods and on other occasions when a jolly contest is in order. Each team has a separate course, consisting of some piece of apparatus placed at each end of the gymnasium. The course of each team is parallel to the others and far enough away so as not to in-

terfere. The kind of races that may be run is limited only by the ingenuity of the director.

Potato races are runs in the Y. M. C. A. Hexathlon in which potatoes or any other light objects are carried (usually blocks of wood) from one place to another. There are two kinds of these races; namely, shuttle and stadium.

For the *shuttle potato race* (eight potato race) a receptacle not more than 2 feet high or an opening not more than 36 inches in circumference is placed upon the starting line for each competitor. Upon a straight line drawn from the receptacle at right angles to the starting line shall be placed at distances of 2 yards eight light objects, ovoid in shape, the greatest diameter not to exceed 4 inches and the smallest diameter not less than 2 inches. The first of these objects shall be placed 2 yards from the receptacle.

Each competitor must pick up each of the objects singly and place the



same in his own receptacle. After having picked up one of the objects he must deposit it in the receptacle before picking up another. After all the objects are placed in the receptacle the competitor must cross the finish line, which is 5 yards behind the receptacle.

In handicap competitions, the marks are given from behind the starting line.

In the *stadium potato races* two boxes 4 inches deep and 12 inches in diameter are set on stands 2 feet high, for each contestant. The outer edges of these boxes are 31 feet apart. The runner may start on either side of the box that contains the potatoes, from a line parallel to its outer edge (the starting mark) with one potato in his hand. He runs around both boxes, each time transferring one potato from one box to the other, and finishes at the starting point on the other side of his own box. Grasping either stand in any way, failure to run around both boxes, or a failure to transfer all the potatoes singly from one box into the other shall disqualify the runner.

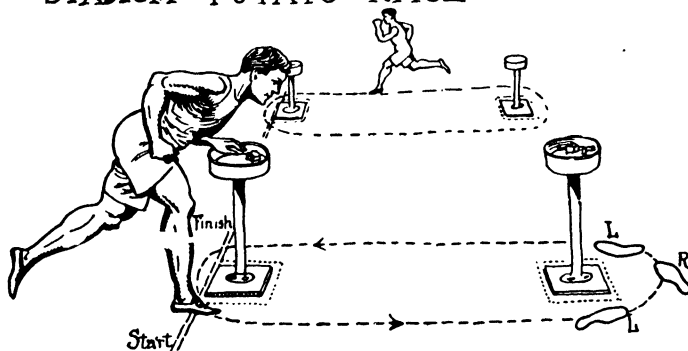
In case potatoes are dropped or a box upset by the runner he must replace them without assistance before proceeding with the run. He must not interfere with another runner in any way. The boxes may be fixed to stands, having their bases approximately the same size as the boxes. The stands are fastened to the floor.

The various distances and number of potatoes are:

60-yard	potato	race	requires	3	potatoes
160-	"	"	"	8	"
220-	"	"	"	11	"
440-	"	"	"	17	"

There are two styles in running the potato races. Some runners keep a steady pace and run in wide ovals. Others run in a narrow oval that necessitates slacking the speed on the turns. The latter is more generally used but is thought to be more exhausting.

STADIUM POTATO RACE



In making the turns, the runner should face the box and bend well over it, if the narrow oval style is used. In this it is also well to give attention to the striding. If, as usual, the run is made from right to left, as in track running, the turn should be made with three steps as follows: the left foot should be at the side of the box, then the right should be placed at the end of the box and then the left started on the new stretch.

Miscellaneous Relays

For special occasions novelty relay races add interest and variety to a program. Such relays may be run in regular side by side manner or in shuttle style or each team having an alley in straight-away style or in the above stadium potato race style.

Here are a few of the ways in which such relays may be run: Hopping, continuous jumps forward or backward, travel forward or backward on all fours, rabbit jump from feet to hands, gallop, continuous

cartwheel, obstacle race, carry a person or other rather heavy object, skip rope, roll some vehicle, sack race, transfer small objects (beans, clothespins, etc.), juggling or balancing objects while running, do some manual training stunt, team races all running at same time in lock step or holding a foot or all astride a pole, etc. A greater variety of such races will readily suggest themselves to a resourceful director.

Indoor Tracks

Gymnasium tracks are built according to specifications that may be obtained from outfitting firms. At present indoor tracks are made too narrow to permit side-by-side running. Some tracks are now placed near the top of the gym and in large gyms this will allow room for a wide track. Indoor tracks are covered with cork linoleum.

The inside rail should incline toward the gym and there should be no uprights at the rail against which runners may bump their heads. These supports should also incline. There should be enough opening below the rail to allow basket balls that are thrown wild to fall to the floor.

Indoor tracks are measured at the middle. There should be one finish mark for all races. This and all the other distances should be plainly marked, giving the distance and the number of laps (times around). For relay races there are marks on each side opposite the center. Spikes should not be worn on this kind of a track. To clean linoleum tracks mop with a damp (not too wet) cloth.

Sometimes in armories and other large halls a temporary pine track is laid, made in sections suitable for storing. This is done to accommodate those who have indoor spiked shoes. It is a great expense to bank such a track, so that is not often done.

Straight-away sprinting indoors is satisfactory only where there is length enough for 40 or 50 yards. The greatest difficulty at present is to get the greatest distance and yet provide enough room in which to stop after crossing the tape. At present some place mattresses against the wall against which the runners jump; others hang them up on rods out from the wall, while others use an inclined part of the track laid against the wall at the end of the course up which the contestants run. Where there is enough room the latter is a good plan.

The writer has invented a buffer that will permit the greatest limit for running and the safest stopping at the finish. This consists of two ropes three feet apart attached on an incline from the floor to the gym gallery. The floor attachment is a floor plate, while the upper part of the rope is fastened to a heavy coil spring, which in turn is fastened to the ceiling. Between the ropes is strung heavy canvas six feet high. Against this the runner jumps with a quarter turn and is thrown back upon the track on his feet.

At the starting place cleats (footbraces) are fastened to the floor at

the required distance 18 or 20 inches apart. These may have iron pegs set into holes in the floor, but enough should be provided to allow for "set back" in false starts. A good plan of starting cleats that does not require holes in the floor is to lay pieces of wood at the start of each lane and parallel with the track. These have notches every three inches into which crosspieces are quickly inserted by each runner to suit himself. This device should be made long enough to allow for "set backs."

A serviceable starting block may be made by using the parallel bar bases, and better still by placing a beat board against them.

Lanes are easily made by fastening screw-eyes into the wall at each end of the gym and stretching the cord between them.

CHAPTER III

FIELD EVENTS

GENERAL RULES FOR FIELD EVENTS

Field Judges

The Chief Field Judge shall see that all implements and equipments are in accordance with the rules and that the field events are conducted expeditiously, and assists Referee in keeping proper relations between track and field events. The Field Judges shall measure with a steel tape, judge, and record each trial of each competitor. Their decision shall be final.

The officials shall have the power to change the place of the competition in any field event if in their opinion the conditions warrant the same.

All measurements must be made with a steel tape. In all weight events and broad jumps, that portion of the tape showing the feet and inches must be held by the official at the take-off or at the circle.

In all scratch events the competitors shall take their trials in the order of their names as printed in the program. In college rules the judges must give a contestant who is in other events at same time opportunity to compete there and here within reasonable time.

In all handicap events the competitor having the greatest allowance shall make the first trial, and so on, in regular order, up to the competitor at scratch or with least allowance, who shall have the last trial.

Cross-Bars and Pegs

In events where cross-bars and pegs are to be used, pegs must be 3 inches long, set on top of the uprights. The cross-bar must be of wood and the ends must not project more than six inches beyond the pegs.

Weight Events

In all weight events thrown from the circle, except throwing the heavy weight for height, the competitor must stay in the circle until his attempt is marked by an official.

In all weight events thrown from the circle, the competitor may touch the inside of the circle or block.

Construction and Measurements.—The circle shall be made of band iron on steel, wood or rope and, except for the discus, shall measure not more than 7 feet (2.134 meters) inside diameter. The circle for the discus shall measure not more than 8 feet 2½ inches (2.5 meters) inside diameter.

Metal: The sides shall be ¼ inch (6.35 millimeters) thick by 3 inches (76.199 millimeters) high.

Wood: The sides shall be 3 inches (76.199 millimeters) thick by 2 inches (50.799 millimeters) high.

Rope: The rope shall be one inch (25.4 millimeters) in diameter.

Finish: The circle shall be painted white. The rope may be tarred as a means of preservation.

A ninety degree sector shall be clearly marked on the ground, the radii lines crossing at the center of the circle. The outer ends of the radii lines shall be marked with flags.

The sector flag shall be entirely of metal. The flag shall be rectangular in shape and shall measure 4x7 inches (101.598 by 177.797 millimeters). The standard shall be not less than 5/16 inch (7.93 millimeters) in diameter and not less than 36 inches (914.392 millimeters) in length. The flag shall be painted red.

Ties in Field Events

In all scratch contests where results are determined by measurements of height or distance, ties shall be decided as follows.

If two or more competitors tie at any height in the standing or running high jump, or pole vault, an additional trial at such height shall be allowed, and, if the tie is still unbroken, the bar shall be lowered to the previous height cleared and one more trial allowed. The bar shall then be raised or lowered until the tie is decided, allowing one trial at each said height.

In case of a tie in any field event for distance, an additional trial shall be given to decide the tie.

In handicap contests, in both track and field events, the award shall be given to the competitor who received the least allowance. For those who receive the same allowance, the tie shall be decided as in scratch events.

In college rules the points and medals are divided. See general rules for track events, page 15.

JUMPING EVENTS

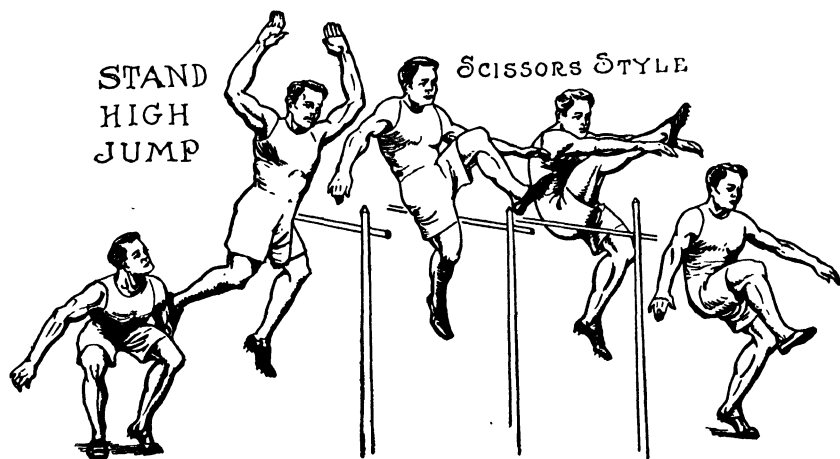
The Standing High Jump

There are two good styles for executing the standing high jump; the "scissors" and the "roll over," in both of which the jumper stands with

side to the bar and about 18 inches from it, and jumps sideways over the bar.

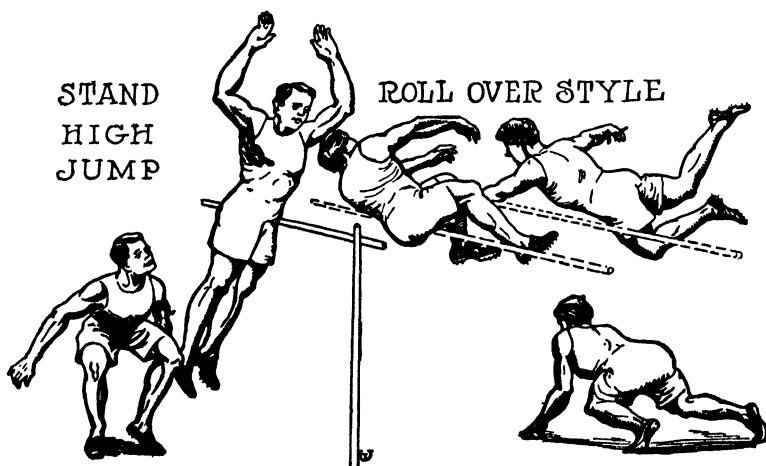
In clearing the bar in "scissors" style the jumper executes a scissors kick by first kicking up the near leg and then the other.

In clearing the bar in "roll over" style the jumper extends his body lengthwise of the bar and rolls sideward over it, as in the hopping-style



high jump. If the jumper stands with the right side to the bar he makes a right turn when above it. Avoid getting the head over the bar first, since that does not constitute a fair jump.

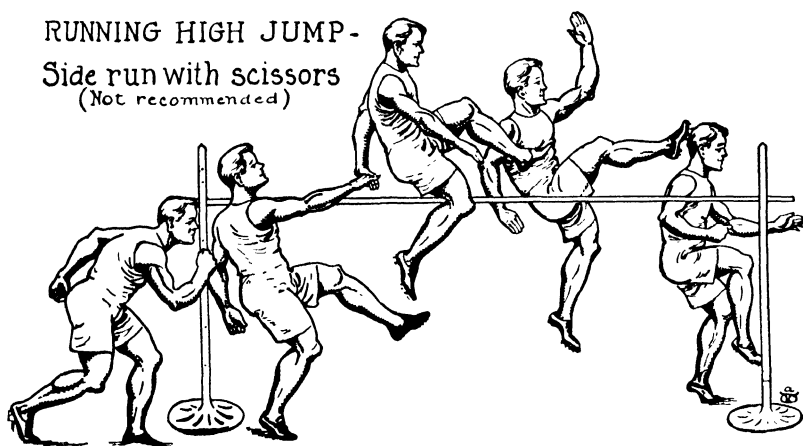
In both cases the jump must be made from both feet at the very same time.



parallel with it, is known as the balk line, and stepping over such line in an attempt is counted as a balk. Two successive balks count as a trial jump.

The Field Judges decide the height at which the jump commences and regulate the succeeding elevations. Three jumps are allowed at each height, and a failure at the third attempt disqualifies the contestant.

A competitor may commence at any height above the minimum height. At each successive height each competitor takes one trial in his proper turn; then those failing, if any, take their second trial jump in like order, after which those having failed twice make their third trial jump. A competitor may decline to jump at any height in his turn, but by so doing he forfeits his right to jump again at the height declined.



The jump is made over a bar resting on smooth pegs projecting not over 3 inches from the uprights and level, and when this bar is dislodged it is counted as a trial jump. Neither diving nor somersaulting over the bar is permitted. All measurements are made perpendicularly from the ground to the upper side of the bar, where it is lowest. The employment of weights or grips of any kind during the jump is forbidden.

A competitor may place a mark for his take-off.

A fair jump is one where the head of the contestant does not go over the bar before the feet and is not below the buttocks in clearing the bar. Neither diving nor somersaulting over the bar shall be permitted.

A line shall be drawn three feet in front of the bar and parallel therewith, to be known as a balk line, and stepping over such line, in an attempt, shall be counted as a balk, and two successive balks shall be counted as a trial.

As soon as a competitor makes a spring in order to jump, this shall be counted as a trial jump.

The distance of the run before the jump shall be unlimited.

Training Hints

See that the pit is soft so as to prevent sprains. To avoid straining muscles, keep them warm. Always do some preliminary jogging, stretching, and massaging of the muscles before jumping. Take only ten or twelve jumps a day, three days a week. If stiffness or soreness comes on, rest and apply massage. The best jumpers wear special jumping shoes with six spikes in front and two at the heel, and a piece of rubber sponge in the shoes to prevent bruising the heels. Learn to alight on both feet, or better still on all fours, to avoid excessive work for the jumping leg. Practice at several inches below your contest mark and do your best only once a week. On alternate days practice sprinting and jogging. Preliminary training should be largely sprinting, high jumping, and accurate striding between marks. If the feet or ankles are even a little lame or strained, rest and apply massage until better.

Jumping Equipment

Outdoors: The "runs" (paths) for outdoor jumping are made like the outdoor track, except that they are only 3 feet wide. Three of these paths should radiate from the take-off mark, one at right angles, and one on each side at a 45 degree angle.

The pit into which the athletes alight is dug one foot deep, framed with board, and filled with a mixture of one part earth to three parts of sawdust. It measures 8 by 14 feet with the jump standards on the broad side.

For indoor high jumping the regulation jump standards for indoor jumping are used.

The springboard high jump is the only distinctively indoor jump. The highest point of the board shall be not more than twenty inches from the floor. The jump is executed just like the regular high jump.

Jumping or Vaulting Standards

Any style or kind of uprights or posts may be used.

The cross-bar shall be entirely of wood, not more than one inch (25.399 millimeters) square in section, and of a uniform thickness throughout. The ends of the cross-bar shall project not more than 6 inches (152.397 millimeters) beyond the pegs.

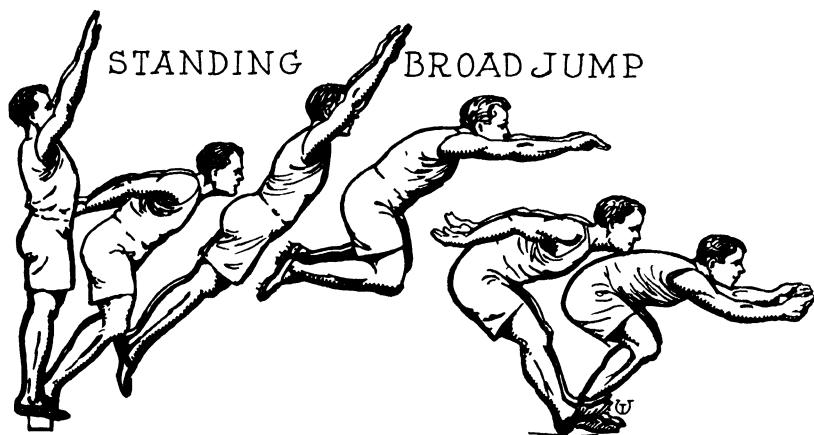
The pegs supporting the cross-bar shall extend horizontally not more than three inches (76.1986 millimeters) from the face of the uprights and shall be without notches or indentations of any kind. The pegs shall be

round, of a uniform thickness throughout, and not more than $\frac{1}{2}$ inch (12.6997 millimeters) in diameter.

BROAD JUMPS

Under the head of broad jumps are included the standing one, two, and three; the standing and running hop, step, and jump; and the running broad jump. Broad jumping is adapted to athletes of all sizes, the most essential factors being accurate stepping and a very powerful spring.

To make the standing broad jump, stand with the feet together, the large joints (ball of the feet) just above the edge of the block. Swing the arms forward and up, then downward and back as a preparatory action. Then incline the body forward, flexing the thighs and legs at



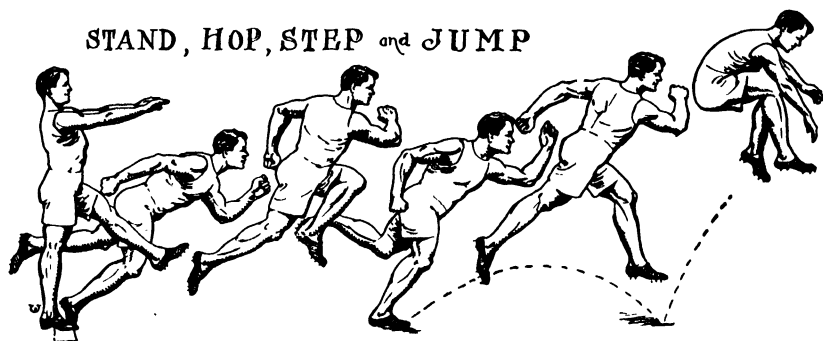
about right angles. In the act of jumping, use all the force possible in the forward arm swing and back lift as well as in the leg spring. In sailing through the air raise legs and bend well forward. Just as the feet strike the ground give an additional forward bend and thrust of the arms to maintain the balance. The angle of the jumper's body as he leaves the block will determine whether he will jump high or low.

In the standing hop, step, and jump, the start is made from one foot; the other foot and the arms swing forward and backward in order to get an impetus. Remember that the hop is done from one foot to the same foot, then a step to the other, then a jump to both feet.

In the running hop, step, and jump, there should be a fast run of about 80 feet.

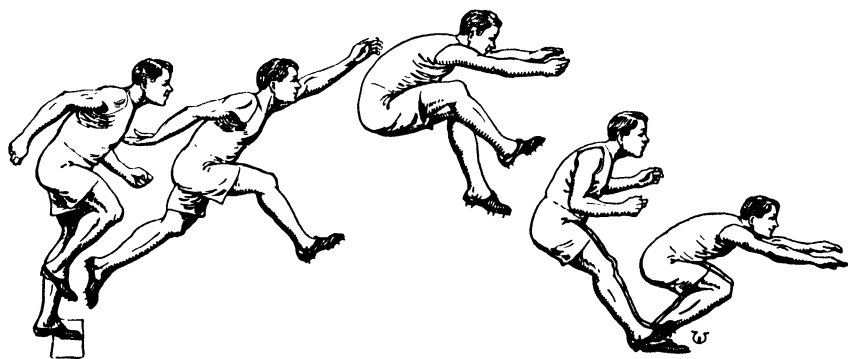
The hop should not be high or there will be too much strain on alighting and the step and jump will be weak. Make the hop low, and the step moderate, and put tremendous effort in the high and broad jump. The rules for the running broad jump govern this event.

In the running broad jump the greatest factors are speed, a good take-off, and a vigorous rising spring. Striding is important and should be practiced often. To help the stride place a mark about 20 feet from the block, another about 50 feet, and the start at about 100 feet. Take a



few long breaths before starting. In making the run, gradually increase the speed to the finish and be sure to strike the striding mark with the correct foot. When near the 50-yard mark hold the breath for the final effort. The last step should be shorter than the others and the front half of the foot alone should be placed upon the block. The run should not be made too fast else it will be impossible to jump high enough. The

RUNNING BROAD JUMP



position of the striding marks vary if there is a strong wind either ahead or behind. Learn to hit the jumping block with the front part of the foot but not with the heel. The knee is only slightly bent in the take-off. In soaring through the air bend forward and raise the knees. Just before alighting extend the legs well forward to gain every inch. On alighting jab the feet downward to avoid sliding. It is not good form to alight sideways, because there is greater danger of falling back or of turning

an ankle. In case you fall backward hop back a few inches rather than fall flat.

Rules Governing Broad Jumps

Each contestant has three jumps and the best three have three more jumps. The A. A. U. allows the best five jumpers three more jumps. The best (not necessarily the last) jump is the contestant's record. The nearest mark made by any part of the jumper's anatomy on the ground is measured at right angles to the near edge of the jumping block. This applies even though the jumper, in falling back, jumps out of the pit.

When starting for a standing jump, if the foot of the jumper leaves the block more than once, or slides forward, it counts as a trial jump, but is not measured. The jumper may, however, raise and lower his heels as often as he likes preparatory to jumping. In the two and three broad jumps there must be no stops between the jumps. For the running broad jump, and hop, step, and jump there is no limit to the run.

If any competitor swerves aside at the taking-off line, or the line extended, or touches the ground in front of the take-off mark with any part of his foot, such a jump is not measured, but is counted against the competitor as one jump. A line is drawn six feet (15 feet in N. C. A. A. rules) in front of the take-off block to be known as the balk line, and stepping, or falling, over such line, or such line extended, in any attempt, is counted as a "balk." Two successive balks are counted as a trial jump.

Take about eight or ten jumps a day, three days a week. Wear sponge rubber in the heels. See that the pit is soft. Before each jump concentrate the attention strongly upon it. In practice place an obstacle in the pit 3 feet high and 8 feet from the block, so as to acquire height in the long jump.

To get speed in the run practice sprinting daily.

Indoor Jumping

There is no difference between indoor and outdoor jumping except equipment as described below.

Equipment

For outdoor broad jumping the pit is made 5 feet wide by 20 feet long, starting 5 feet in front of the take-off block.

The distances in feet and inches should be marked on the frame of the pit so that an athlete at practice may measure his own jumps without using a tape. Then by using a T square he can be accurate.

The take-off block (toe block) is a wood block 8 by 4 inches and 5 feet long painted white sunk flush with the path, from which the athlete jumps and the measurements are made. The Y. M. C. A. and A. A. F. rules require a toe-pit to be dug in front of the block one foot wide and

3 inches deep. If the jumper makes a mark with his foot on the bottom of this pit in the act of jumping, that jump is not credited to him. The A. A. U. and the Olympic rules do not have this pit, but instead the ground in front of the block is sprinkled with lime so that a step-over is plainly seen and the jump not credited.

For indoor broad jumping an ordinary jump board (beat board) is used. It must not be higher than 5 inches and must be secured against slipping. For alighting, gym mats are used. For the standing broad jump a strip of rubber covers the mat and is fastened to the jump board to prevent slipping. For the running broad jump a 4-inch mat is used, not covered with rubber, but fastened.

The National Committee on Women's Athletics has adopted a very sensible "take-off" for the running broad jumps: A take-off board 2 by 3 feet is coated with rosin, the measurement is made from the contestants' toe mark on this board.

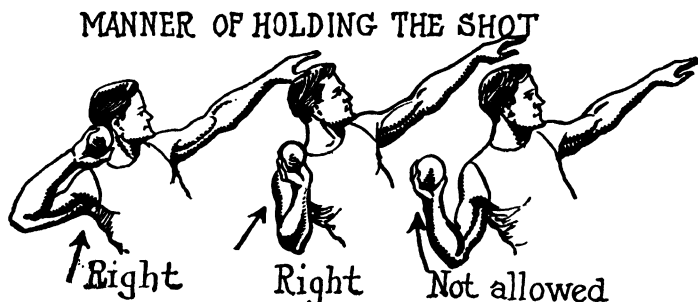
CHAPTER IV

WEIGHT EVENTS

For general weight event rules see page 30.

THE SHOT PUT

This class of events includes all throwing and putting of heavy objects, such as the shot put, hammer throw, discus throw, javelin throw, and heavyweight throw. For the shot put, a ball weighing 8 pounds is used for young boys, a 12-pound size for young men, and 16- and 24-pound sizes for large men. These balls resemble a cannon ball and are made of either iron, lead, or brass.



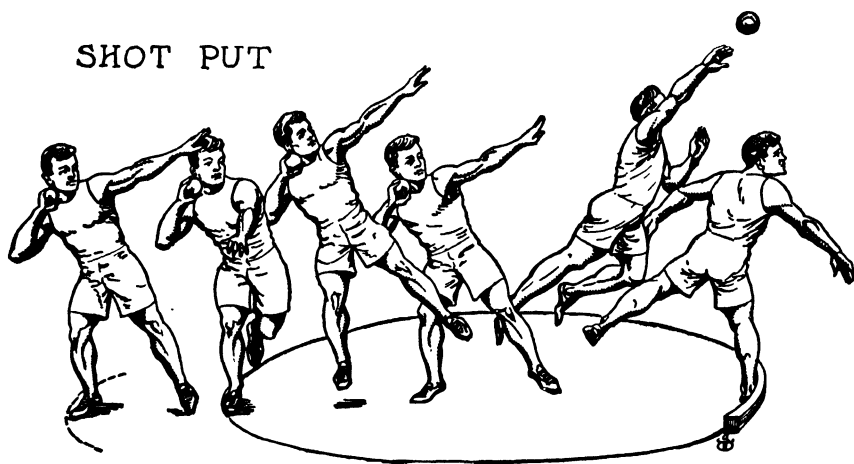
A right-handed putter should pick up and carry the shot with the left hand so as not to give all the work to the putting arm. Any kind of a preliminary run is allowed, but the style used by all good putters is as follows: Do not hold the shot flat in the palm of the right hand (some strong athletes hold it high up on the ball of the thumb and fingers). The shot rests against the neck, the elbow of the supporting arm extended toward the front of the circle, the left foot lightly touching the ground. Then swing the left leg toward the right and just back of it; kick it to the side. Balance on the right leg with the left arm and leg extended toward the front of the circle and at the same time hop on the right foot. Alight on both feet beyond the middle of the circle, then jump quickly and low forward from both feet, making a half turn to left and thrusting the shot forward and upward at 45 degrees, alighting on the right foot against the toe block. Make the movement vigorously and do not make the turn too soon (while hopping).

Rules

The shot must be put from the shoulder with one hand only, and should never be brought behind or below the shoulder.

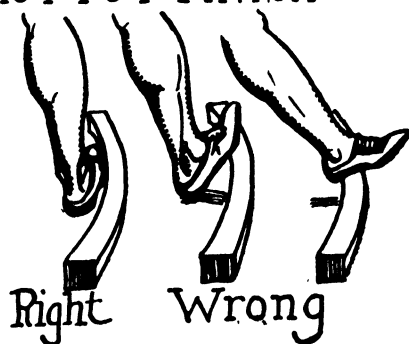
In the middle of the circumference of the circle, at the front half,

SHOT PUT



place a toe block stop-board and fasten it to the ground. This toe block painted white is 4 by 4½ inches by 4 feet, conforming to the line of a 7-foot circle. In making puts, the feet of the competitor may rest against but not on top of this board.

SHOT PUT FINISH



A fair put is one in which no part of the person of the competitor touches the top of the toe block or the ground outside of the circle.

The measurement of each put is taken at the circle from the nearest mark made by the fall of the shot to the inside of the circumference of

the circle on a line from such mark made by the shot to the center of the circle.

Foul puts and letting go the shot in making an attempt are counted as trial puts without result. It is a foul if the competitor steps on the circle, or leaves the circle before his throw has been marked.

Each competitor has three trial puts, and the best five, three more. Each competitor is credited with the best one of all his puts.

The use of a harness for the hand composed of a leather strap around the wrist and small fingers from the wrist across the palm of the hand around each finger shall not be permitted.

No device of any kind which can be used as a support in aiding to put the shot shall be allowed.

Training Hints

Beginners should first practice the "foot work," without the shot. When starting to use the shot do not try to put it as far as you can, but concentrate upon form. Gradually increase the effort of the put. Do only ten or a dozen puts a day. To prevent wrist sprain wear a wrist bandage when putting. Do not try to get a slow easy, graceful action; the best putters work with snap.

Construction

The shot shall be a brass shell filled with lead, and spherical in shape.

Weight: The shot shall weigh not less than 16 pounds (7.257 kilograms) in A. A. U. and college meets.

HAMMER THROWING

This event is done with an object like a shot to which is attached a wire handle and grips. Like the shot it must be thrown from a seven foot circle.

It is a dangerous sport and should not be introduced unless spectators can be kept 200 feet away in every direction, or a wire cage be built around the circle (see specifications). The usual weights of hammers are 12 and 16 pounds.

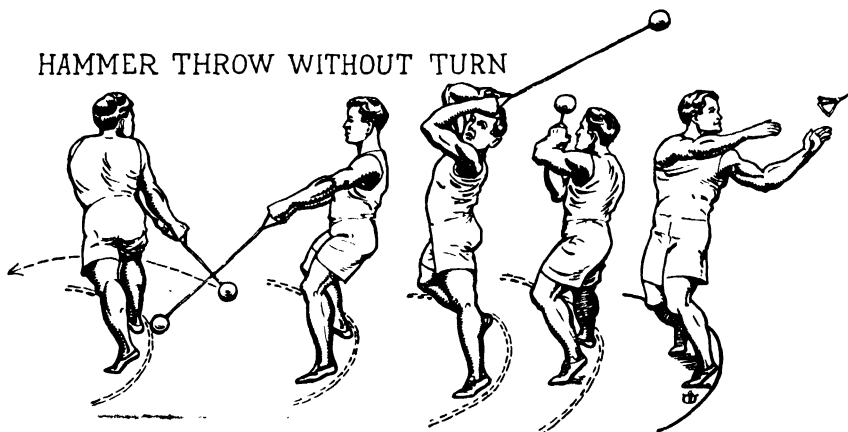
There are two styles of throwing: (1) without a turn; (2) with a turn.

For the *no-turn style*, stand with the feet $1\frac{1}{2}$ feet apart heels near the front of the ring, and the back in the direction in which the throw is to be made. Place the hammer head on the ground, well to the right of the circle. Start the swing to the left at arm's length. Circle the hammer diagonally around the head two or three times, then hurl it backward and upward at an angle of 45 degrees. There may be some difficulty in keeping the balance after the throw. If this cannot be overcome,

the thrower should stand nearer the center of the circle so as to allow for a backward step if necessary.

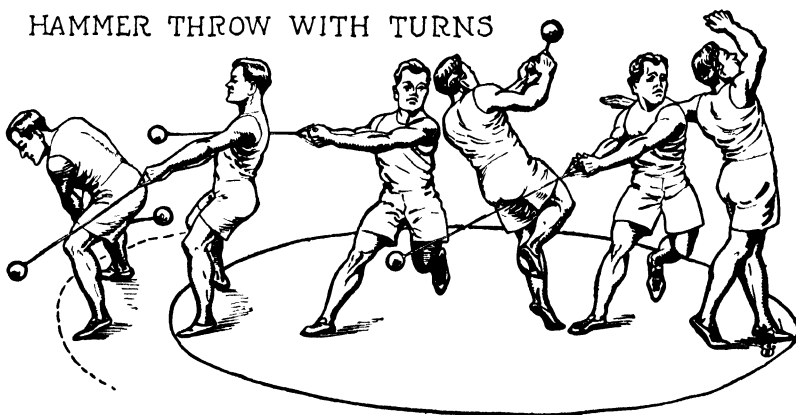
For the "*turn*" style, the thrower stands near the far part of the

HAMMER THROW WITHOUT TURN



circle in the attitude described. After one or two swings around the head the thrower turns around with each succeeding swing (one, two, or three) and then hurls the hammer. These turns give a great impetus to the throw.

HAMMER THROW WITH TURNS



The turn is made as the hammer swings up to the left. It is a full turn, with quick step action. The right foot steps to the left and over the left foot with a light quick spring, then the left swings around to complete the turn. The position is shifted backward about two feet with each turn. When hurling the hammer make a final step to the right foot.

Rules

All throws, to be valid, must fall within a 90-degree sector marked on the ground.

A fair throw is when no part of the body of the competitor touches the ground outside the circle.

It is also a foul if the competitor steps on the circle or leaves the circle before his throw has been marked.

Each competitor has three trial throws, and the best five, three more.

Each competitor is credited with the best one of all his throws.

The measurement of the throws is from the nearest edge of the first mark made by the head of the hammer to the inside circumference of the circle on a line from such mark made by the hammer to the center of circle.

Letting go of the hammer during an attempt, or touching the ground outside the circle with any portion of the body while the hammer is in hand, are foul throws, which shall not be measured but which counts as a throw.

If the hammer breaks while in the air, it is not considered a throw.

Training Hints

Practice throwing three times a week, and on the other days do more sprinting, jumping, and jogging. Beginners should not attempt the throw with a turn until familiar with the no-turn style. In starting to learn the turn do so without the hammer. After a while use some light object, and then gradually increase the weight until the full weight is reached.

After you are accustomed to the turns, daily practice should be as follows: some jogging to warm up, throw without a turn; then with one, two, and three turns in succession, but without trying for distance. Finally try for distance. Use gloves. Grasp with end of fingers, the left hand on the longest wire loop.

Specifications of Implement

Head: The head shall be a brass shell filled with lead or cast gray iron and spherical in shape.

Handle: The handle shall be a single unbroken and straight length of spring steel wire not less than $\frac{1}{8}$ inch (3.175 millimeters) in diameter, or No. 36 piano wire, .102 inch (2.591 millimeters) in diameter. The handle may be looped at one or both ends as a means of attachment.

Grip: The grip may be either of single or double loop construction, but must be rigid and without hinging joints of any kind.

Connections: The handle shall be connected to the head by means of a swivel which may be either plain or ball bearing.

The grip shall be connected to the handle by means of a loop. A swivel may not be used.

Weight: The weight shall be not less than 16 pounds (7.257 kilograms). Complete as thrown (A. A. U. and colleges).

Length: The length shall be not more than 4 feet (1.219 meters) complete as thrown.

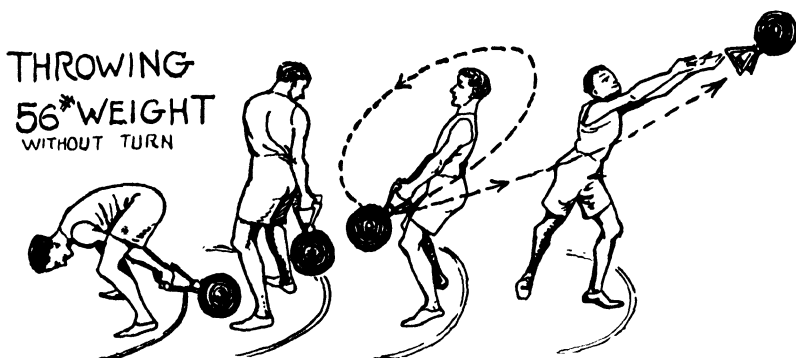
It is strongly recommended that all hammer throws be from an enclosure or cage to ensure the safety of spectators. A cage of the following dimensions is suggested.

The cage should be circular in form, having an inside diameter of not less than 27 feet (8.229 meters). The height should be not less than 7 feet (2.134 meters). There should be an opening, through which the throw is made, of approximately 23 feet (7.010 meters). The cage should be composed of $2\frac{1}{4}$ by $4\frac{1}{2}$ inches (57.1489 by 114.297 millimeters) diamond mesh wire screen of $\frac{3}{8}$ inch (9.5248 millimeters) wire. The screen should be mounted upon pipe uprights, buried in the ground to a depth of 30 inches (762 millimeters), and spaced not more than 8 feet (2.438 meters) apart. The size of the pipe should be $2\frac{1}{2}$ inches (63.4988 millimeters).

It might be desirable, in some instances, to install a demountable cage, having sockets grouted permanently in the ground, into which the pipe uprights might be set when the cage is erected. The sockets could be provided with covers when the uprights are removed.

THROWING THE 35 OR 56-POUND WEIGHT

Throwing the 35 or 56-pound weight is used by some athletic clubs. There are two kinds: (1) for distance; (2) for height. The distance throw



is really a clumsy hammer throw. Stand in the center of the circle with legs spread. Place the weight in front on the ground. Grasp the handle and swing the weight backward between the legs, then forward and to the right of the right leg. From there swing it to the left and make a turn, as in the hammer throw, and hurl it. The throw for height is

started like the above, then backward between the legs, and then upward to the pan.

Rules for Distance Throwing

A fair throw is one where no part of the body of the competitor touches the top of the circle or the ground outside the circle.

The measurement of each throw is taken at the circle from the nearest mark made by the fall of any part of the weight or handle to the inside edge of the circumference of the circle on a line from such mark to the center of the circle.

Each competitor has three trial throws, and the best five, three more. Each competitor is credited with the best one of all his throws.

In making his throw, the competitor may assume any position he chooses and use both hands.

Foul throws and letting go the weight during an attempt count as trial throws without result.

Rules for Height Throwing

A barrel head 3 feet in diameter is suspended horizontally in the air. The Field Judges determine the height at which the barrel head is to be fixed at the beginning of the competition, and at each successive elevation.

A fair throw is one where no part of the body of the competitor touches the ground outside the circle before the weight touches the barrel head, and where any part of the weight or handle touches any part of the barrel head.

The measurement of each throw is from the ground perpendicularly up to the lowest part of the barrel head.

The method of competition is the same as in the running high jump. The 56-pound throw for height has been discontinued in national meets.

Training hints for shot and hammer throwing may be used for this event.

Specifications of Implement

Head: The head shall be of molded lead, or a brass shell filled with lead, and spherical in shape, having imbedded a forged steel eye bolt as a means for attaching the handle.

Handle: The handle shall be made of round iron or steel measuring $\frac{1}{2}$ inch (12.7 millimeters) in diameter, bent in a triangular form, no side of which shall be more than $7\frac{1}{4}$ inches (184.146 millimeters) inside measurement.

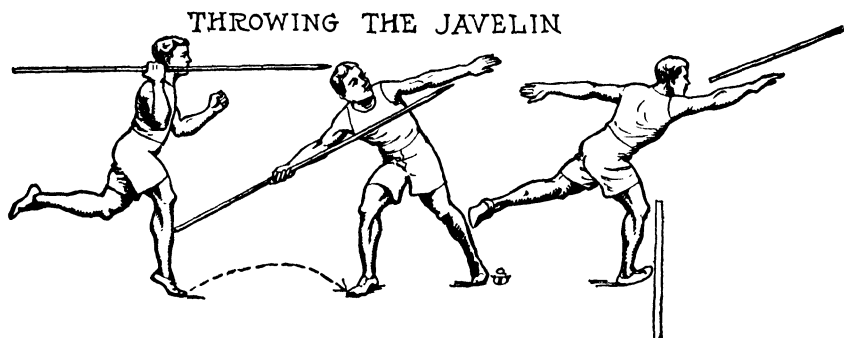
Connection: The handle shall be connected to the head by means of a welded steel link measuring $\frac{3}{8}$ inch (9.525 millimeters) in diameter.

Weight: The weight shall be not less than 56 pounds (25.401 kilograms) complete as thrown.

Length: The length shall be not more than 16 inches (406.39 millimeters) complete as thrown.

THROWING THE JAVELIN

This ancient Greek event has been added with the revival of the Olympic games. This is not different from throwing any other object of the same weight, except that the javelin must be thrown so that the point strikes the ground before any other part. In the style mostly used, the javelin is grasped at the middle, and held with bent arm above the shoulder. Take a fast 15-yard run. Just a few feet from the toe-block take a hop with the right foot (for a right-handed thrower), then plant the left foot forward and a little to the left, throw, and immediately spring from the left foot forward and alight on the right foot just back of the toe-block.



A full-arm swing should be developed, as in distance throwing with a baseball. Some throwers prefer to throw with a bent-arm position, hand back of shoulder like the throw of a baseball catcher. Practice for this event should be graduated and moderate so as not to strain the arm. Make the run, turn, and throw continuous.

Rules

The throwing takes place from behind a scratch line properly marked, which is a board $2\frac{3}{4}$ inches in width and 12 feet in length, sunk flush with the ground.

The javelin is held by the grip, and no other method of holding is admissible.

No throw is counted in which the point of the javelin does not strike the ground before any part of the shaft.

The throw is measured from the spot at which the point of the javelin first strikes the ground, to the scratch line or the scratch line produced.

Each competitor has three trial throws, and the best five shall have three more. Each competitor is credited with the best one of all his throws. The thrower must not place his foot or feet upon the board nor cross the line until his throw has been marked. If the javelin breaks while in the air, it is not counted as a trial.

An unlimited preliminary run is allowed (about a 15-yard run is usually taken). Training hints for shot and hammer may be used in this event.

Specifications of Implement

The javelin shall be of wood with a sharp iron or steel point. The javelin shall be constructed in such a way that the space between the foremost point and the center of gravity is not longer than 1.203 yards (110 centimeters) or shorter than 2.953 feet (90 centimeters).

It shall have, about the center of gravity, a grip formed by a binding 6.3 inches (16 centimeters) broad, of whipcord, without thongs or notches in the shaft, and shall have no other holding than the above mentioned binding, whose circumference at either edge shall not exceed the circumference of the shaft by more than .984 inch (25 millimeters).

The length shall be not less than 8 feet 6 $\frac{3}{8}$ inches (260 centimeters) complete as thrown.

The weight shall be not less than 1.76 pounds (800 grammes) complete as thrown.

DISCUS THROWING

This event is also one of the ancient Greek events and in its modern form is considered by some the most attractive weight event. The old Greek style has been repeatedly tried, but it is so awkward that it has been discontinued even in Olympic meets. The Y. M. C. A. still retains it in the rules but it is doubtful if it is ever used.

The technic of the ancient style is to stand on a pedestal much like an indoor pole-vaulting block, with the right foot forward and at the lower part, that is, inclined in the direction of the throw. Hold the discus with both hands above the left shoulder, then bend into the classic pose with the discus in the right hand and arm extended backward; then swing the arm forward and spring from the right foot, hurling the discus and alighting on the right foot. It is uncertain whether the thrower was allowed to step forward with the left foot as shown by the dotted lines of the drawing but it is most reasonable to think he was.

In the modern style it is thrown from a circle 8 feet 2 $\frac{1}{2}$ inches in diameter. Stand with the legs spread, the right foot at the back of the

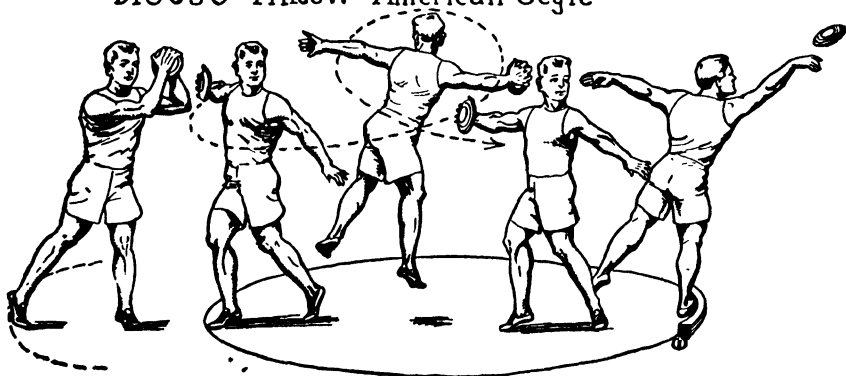
circle and the left toward the front. Grasp the discus with the right hand, steadied with the left. Swing it backward to arm-spread position. While holding it in this position spring toward the front of the circle from the

DISCUS THROW GREEK STYLE



left foot, make a full turn to the left, alighting on the right foot, replacing the left foot on the ground toward the front of the circle in the spread position, then again spring toward the front of the circle with a left half turn and hurl the discus, alighting on the right foot at the front of the

DISCUS THROW—American Style

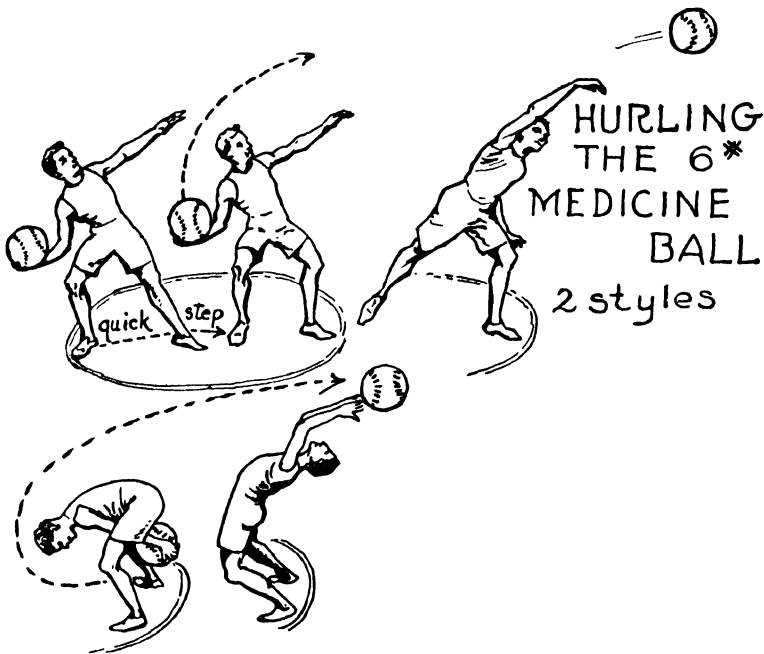


circle. These springs are not done so high as shown in the illustration. They are more like fast, low, shifting steps. Some athletes make two or three turns before throwing. Although that gives more impetus to the throw, the danger to bystanders is greater. The rules are the same as for

the hammer throw, except that the circle is larger. Training hints are also similar.

Specifications of Implement

Construction: The discus shall be composed of a metal rim, permanently attached to a wood body, brass plates set flush into the sides of the wood body and, in the exact center of the discus, a means for securing the correct weight. The brass plates shall be circular in form, having a diameter of not less than 2 inches (50.799 millimeters) nor more than $2\frac{1}{4}$ inches (57.149 millimeters). Each side of the discus



shall be a counterpart of the other side and shall have no indentations, projecting points, or sharp edges. The sides shall taper in a straight line from the beginning of the curve of the rim to a line a distance of not less than one inch (25.399 millimeters) from the center of the discus.

The largest dimension shall be a circle not less than $8\frac{5}{8}$ inches (219.07 millimeters) in diameter. The thickness through the exact center, on a line perpendicular to the diameter, shall be not less than $1\frac{3}{4}$ inches (44.449 millimeters). The thickness at 1 inch (25.339 millimeters) from the center shall be exactly the same as at the center. The thickness of the rim at a distance of $\frac{1}{4}$ inch (6.35 millimeters) from the

edge shall be not less than $\frac{1}{2}$ inch (12.70 millimeters). The edge shall be rounded on a true circle.

The weight of the discus shall be not less than 4 pounds 6.55 ounces (2 kilograms) complete as thrown.

INDOOR WEIGHT EVENTS

The only weight event that is in general use indoors is the shot put. There is no difference between this and the outdoor event except that a leather or rubber covered shot is used.

Hurling the Medicine Ball

This is a new event introduced by the author to add to the limited number of indoor weight events. It may well be substituted for the discus throw, to which it is closely allied. It may be thrown in any manner from a 7-foot circle, but it is best to throw it either backward overhead, using both hands or by holding it in one hand, taking a side-ward step toward the front of the circle, and hurl the ball side upward. A 6 pound ball is used.

Foot-Fault Penalties

The present rules requiring 7-foot circles for weight events and measuring long jumps from joist edges is faulty in principle. The very genius of these contests is to encourage supreme effort, but at present the limitations prevent this.

To correct these restrictions the running long jumps should be measured from toe to heel and the weight events should permit an unlimited run and follow-through, the measurement to be made from the last foot mark in the act of hurling.

CHAPTER V

VAULTING

THE POLE VAULT

The pole vault is the most spectacular and at the same time the most exacting of athletic events, requiring strength, speed, and skill. A left-footed jumper grasps the pole with the ordinary left-hand grasp and the right-hand reverse grasp, hands 30 inches apart. For the average vaulter the right hand grasps the pole according to the following instructions: When the bar is placed 9 feet high, the right hand is at 9 feet on the pole; for each foot that the bar is raised the right hand is raised 8 inches. Carry the pole on the right side of the body with the point directly forward and raised a little, left arm bent, hand near right chest, right arm straight back. Run squarely to the front, avoiding a twist.

The take-off or jumping spot should be directly under the right hand when the pole is planted ready for the spring and the striding marks placed at about 40 and 80 feet from the stands. These marks must be placed so as to help produce accurate running, as described in the high jump. During the run, look at these marks. Start to run at about 100 feet.

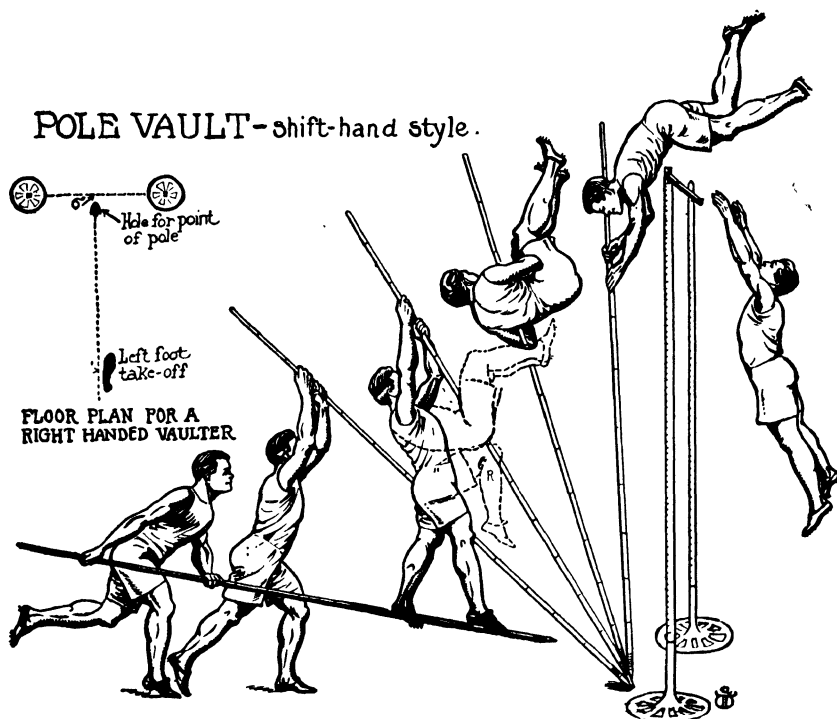
Plant the pole lightly by thrusting the end into the hole just before the left foot strikes the take-off. Do not jab the pole into the hole. At the same time throw the arms forward up and slide the left hand up close to the right. The arms at this point should be almost straight, the hands above the left foot or a few inches in front of that spot. Any other spot for the take-off will strain the chest or back muscles, and if the arms are too straight or too much bent you cannot rise well. The left foot should be placed upon the take-off a couple of inches to the right of a line drawn directly back of the point of the pole.

In the rise, swing the body forward at arm's length to the right of the pole, facing directly forward, kicking up the bent right leg vigorously. When half-way up to the bar, flex the thighs and legs so that they are above the head and the bar. Now straighten out, turn to the left, pull up and push up strongly with the arms. This brings the hips above the bar and facing it in an arched position with thighs flexed. Now push over the bar and release the grasp, with the left hand first, allowing the pole

to drop back. Alight facing the bar or with an additional turn to the left. Keep eyes on bar from the jump until over the bar.

Training Hints

For several weeks before attempting to vault, practice the following developing exercises: On the horizontal bar, chin several times; then do the same and circle backward over the bar. Circle forward over bar. Hang and raise feet to the bar. Free backward circle. Pull up and



shoot over a crossbar placed 2 feet in front of and as high as the bar. Practice walking on the hands. Do the hand balance against the wall, then bend and straighten the arms. Practice the rope vault. Practice sprinting and jogging.

When starting to use the pole do not try to vault over a cross-bar for a few weeks, or until the movement is thoroughly learned. Preliminary practice with the pole should be (planting the pole and using the grasp at about 8 feet high): Plant the pole and swing forward. Plant, swing, and rise. Plant, swing, rise, pull up, etc. Introduce the bar only when able to do about 8 feet without it. Do not vault more than six times a day. Sprint some each day. Rest Friday. Do your best on Saturday. Give much attention to massage. If sore and stiff, rest and massage.

Other Styles of Vaulting

For those who have not the time to devote to learning the exacting shift-hand style, and especially for boys, the no-shift style is recommended. In this the hands are held about 2 feet apart and neither of them is moved from that position until after the rise, swing, pull up, and shoot over are made. It is impossible to go high with this, but it is much easier and safer than the other style.

The vault for distance is an event seldom, if ever, now used in meets, but it would be more appropriate for boys than the vault for height. The action is much like the above styles except that there is no necessity for getting so much of a "lift."

Pole Vaulting Rules

The height of the bar at starting and at each successive elevation is determined by the Field Judges.

Each competitor is allowed three trials at each height, and the competitor who fails at the third attempt is disqualified.

A competitor may commence at any height above the minimum height. He must, however, jump at every following height until he has forfeited his right to compete further except in the all-round and decathlon.

The vault is made over a bar resting on pegs.

As soon as a competitor has left the ground for the purpose of making a jump, the jump is counted as a trial.

A line is drawn 15 feet in front of the bar and parallel therewith, to be known as the balk line, and stepping over such a line, or such line extended, in any attempt is counted as a "balk." Two successive "balks" are counted as a trial jump.

Any competitor is allowed to dig a hole not more than 1 foot in diameter at the take-off, in which to plant his pole, or a sunken wooden stop box and board 40 inches long, 24 inches wide at front and tapering to 6 inches wide at the stopboard, where it shall be 8 inches deep.

A competitor must not, in the moment that he makes a jump, or after leaving the ground, place his lower hand above the upper one or move the upper hand higher up on the pole.

Poles may have a binding (electrician's tape), but must not have any further support for the hands.

If the uprights are moved at all they must not be changed more than 2 feet in any direction, and not more than one hole may be made by a competitor. The take-off ground about the jump must be level.

The uprights should be at least 12 feet apart.

All measurements are made perpendicularly from the ground to the upper side of the bar where it is lowest.

In the pole vault, if in making a trial the competitor's pole is broken,

it is not counted as a trial. (Bamboo poles are best used since they do not break so easily.)

If the uprights are moved, the Field Judges should make a re-measurement, because if there is any inequality in the ground at all, changing the uprights may make a difference varying from 1 inch to $\frac{1}{4}$ inch, and a competitor should not be allowed to obtain an advantage in that way.

Specifications of Implement

The pole shall be either of wood or bamboo and may be of any length or diameter. It shall have no assisting devices except as provided for, but may be wound or wrapped with adhesive tape. The wrapping must be of uniform thickness. The lower end of the pole may terminate in a single metal spike or a wooden plug.

The pit should be 12 by 12 feet and one foot deep filled with mixture of one part earth and three parts sawdust.

INDOOR VAULTING EVENTS

The Pole Vault

This event is like the outdoor event except in equipment.

For indoor vaulting, portable adjustable standards are used and the alighting is done on thick mats. A block, 2 by 3 feet beveled from 1 inch at the front to 4 inches at the back, is used into which the prong is planted in the act of vaulting.

A device for raising the crossbar, suggested by M. I. Foss, consists of a loose wooden jacket on the upright, at the top of which is attached the peg (bar rest). In using this the stop-pin is inserted below the jacket.

The author desires to suggest a device to overcome the delay in replacing the crossbar when it is beyond reach. This consists of a fork device across which the bar is laid and then elevated.

The Rope Vault

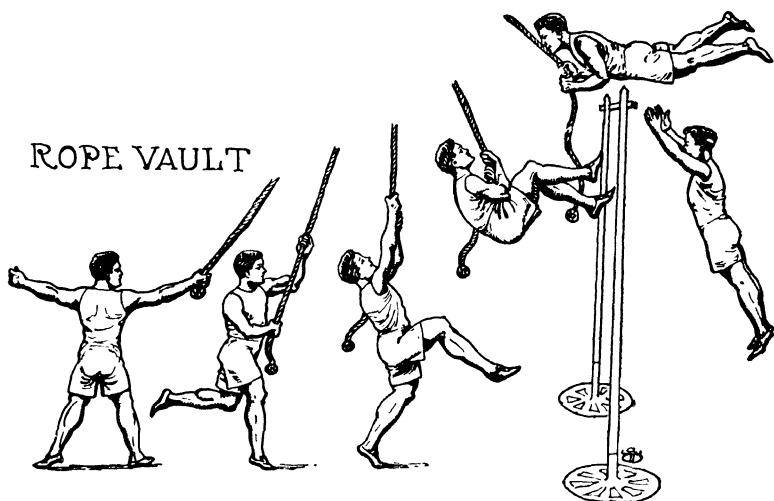
The rope vault is a variation of the pole vault. It is done with an ordinary climbing rope, such as is found in gymnasiums suspended from the ceiling. It is a much safer event for beginners than the pole vault, for which it serves as a good preliminary training.

There are two good styles of rope vaulting: (1) The single run and (2) the double run. In the single run style the vaulter grasps the end of the rope as far back as he can get from the bar, runs toward the bar, at the same time taking up on the rope so that as he is about to jump both hands hold the rope at a point a little higher than the head, then completes the movement like the pole vault. Some vaulters prefer not

to make a turn in clearing the bar. The jump should be made before the rope comes to a vertical position during its forward swing.

In the double-run style the vaulter grasps the rope, while standing under the crossbar. He runs away from the bar as far as possible, swings up in the air, turns and then swings or runs toward the bar and vaults.

Rules Adopted by the Y. M. C. A.—The rope may be of any length or thickness, suspended from the ceiling or beams. No assisting devices, such as knots or crossbars, are allowed. The lower end of the rope shall not be higher than 18 inches from the floor. The jumping standards must be placed so that when the bar is five feet from the floor the end of the



taut rope will just touch the bar. The standards must not be moved from that spot. The lower hand may be shifted to any position not above the upper. The upper hand must not be moved after it grasps the rope in the act of jumping. Contestants must clear the bar at least on the second forward swing. The rope is to be grasped by the hands only. Taking more than two swings constitutes a trial. In other respects the rules for the pole vault govern.

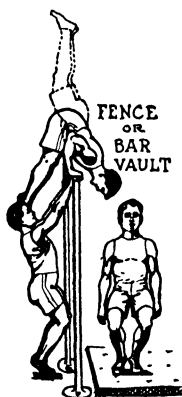
Note.—The rope vault was first introduced as an athletic event by the author in 1897 and later adopted by the Y. M. C. A.

The Fence Vault

The adjustable vaulting bar is used for this event. A gymnasium mattress is suspended from the bar, which serves as the lower part of the fence.

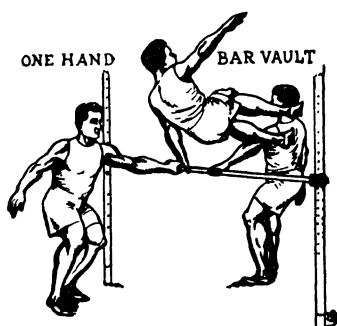
The vaulter stands facing the bar, grasps it with hands about 8 inches

apart. He then springs and pulls upward to a bent position over the bar with elbows pressed against the trunk, hips well up, feet on the near side, and head on the far side of the bar. He then straightens his legs to a momentary bent arm hand balance and then goes over the bar, dismounting to the mat with a quarter turn.



Rules

1. The vaulter's feet may leave the floor but once in making an attempt. They may, however, rock from heels to toes without leaving the floor, as often as desired.
2. Both feet leave the floor at the same time.



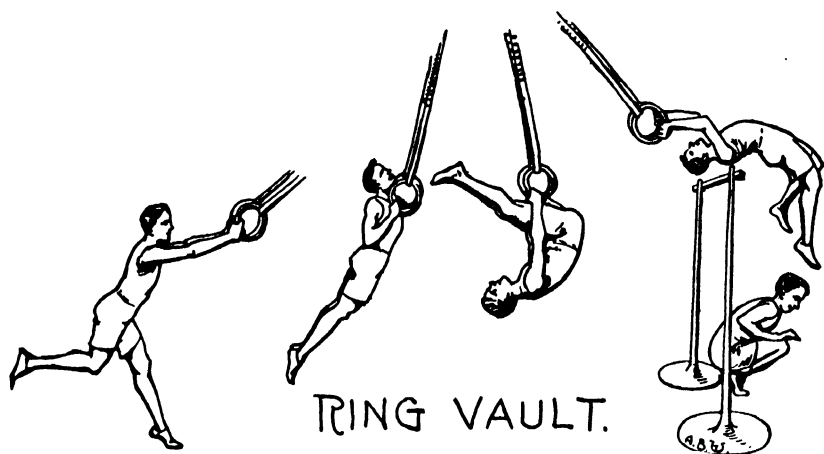
3. No part of the body may touch the bar or mat during the vault except the hands while grasping the bar.
4. There must be a distinct continuous forward motion throughout the vault.

The One-Hand Fence Vault

The manner of vaulting with one hand is much like the standing high jump, roll-over style. Of course one hand is on the bar throughout.

The Ring Vault

This event is done with the flying rings as follows: The under edge of the rings in a hanging position must not be higher than 6 feet, 3 inches from the floor. The jumping standards are placed in front of the rings in such a position that when the cross-bar is at 8 feet, the under edge of the ring when stretched taut will just touch the top of the bar. Then the



standards are moved forward away from the rings one foot. At each additional six inches in height to which the bar is raised the standards are moved forward 6 inches. The contestant must clear the bar on the first or second forward swing. He may use a run or jump at any time during these swings. Taking more than two swings constitutes a trial. In other respects the rules of the pole vault govern.

CHAPTER VI

MISCELLANEOUS INDOOR FIELD EVENTS

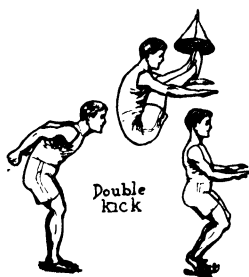
HIGH-KICKING EVENTS

There are several styles of high kicking, but the more popular styles used in indoor meets are the scissors, the double, and the hitch and kick. If a high kick is scheduled without specifying any particular type, the contestants may use any style they wish. There is no limitation as to how the kicker must alight except that he is not to be assisted. In other respects the rules of the running high jump govern.



The Scissors Kick

This is the best style of kick. In it the kicker jumps and kicks with the same foot and alights on the other foot. The approaching run should be made like that of the running high jump, and the free leg should be used in giving a strong upward impetus.

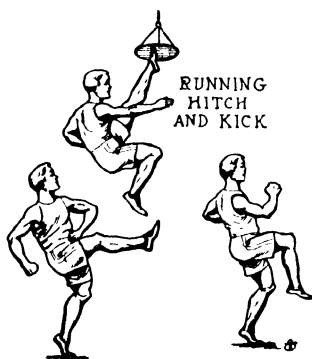


The Double Kick

In this the kicker must jump from both feet and kick the pan with both at the same time. This requires a strong forward bend of the trunk. The legs should be raised with the knees bent and spread.

The Hitch and Kick

In this the pan must be kicked with the jumping leg and the kicker



must alight on the same foot and hop twice to demonstrate that he has his balance.

Other Kicks

In kicking informally athletes are sometimes fond of doing the double backward, the single backward, the double forward jump and single kick, and the stretch kick. In the double back kick the athlete should stand

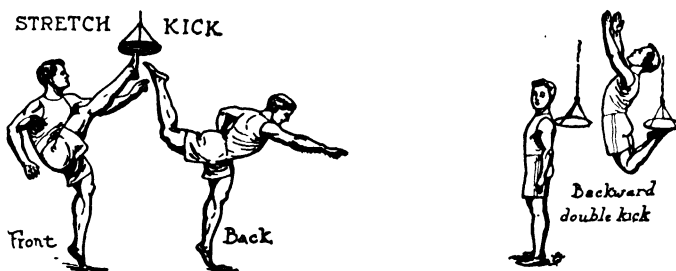


with his back touching the pan. After he jumps he should hollow the back as much as possible.

In the single backward kick bend the trunk forward as the foot is raised. Do not try to turn the leg to one side or to look at the pan during the kick, but raise the leg directly backward.

In the standing stretch kick the kicker must keep one foot on the floor.

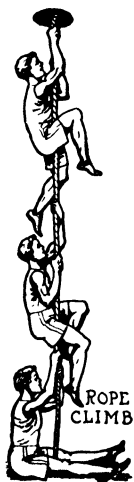
Kicking pans are made of leather sewed to a heavy circular wire frame one foot in diameter. This is suspended to any overhead object



by means of a rope or light chain and pulley. Outfitters put out some excellent devices for quick adjustment.

The Rope Climb

An ordinary gym climbing rope is used for this event. A tambourine or bell is fastened near the rope 18 feet from the floor. The start shall be by pistol shot, and the time taken from the flash to the touching of the



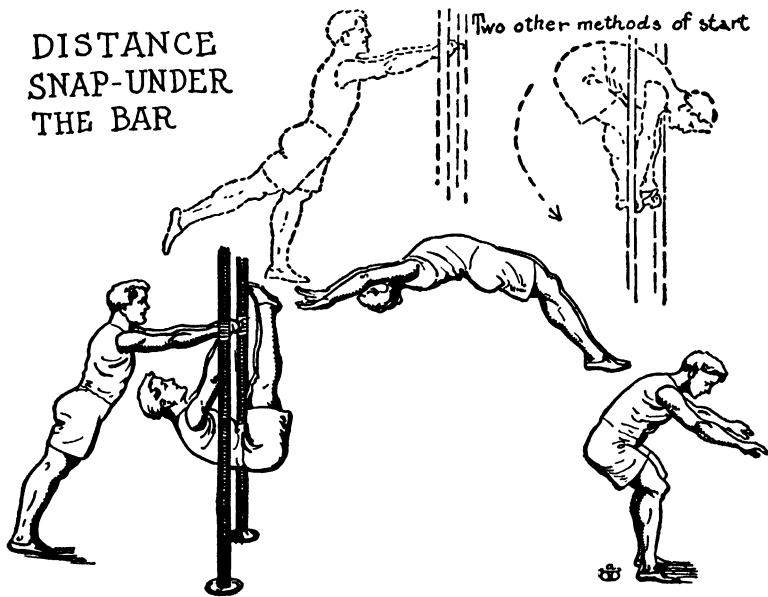
bell or tambourine. The contestant shall sit on the floor, with thighs flexed (legs extended in front) and shall not touch the floor with any part of his person after the pistol shot. Each contestant shall have three trials, the time of the best one to be taken. The rope must not have any assisting devices, such as knots, balls, etc.

Technic.—The best way to climb is “hand-over-hand,” working the legs alternately up and down with knees bent. The knee should be raised first and then the hand of the same side should be raised.

Snap under the Bar

In gymnastic nomenclature this is called “short underswing for distance.” It was first introduced as an athlete event by the author in 1900 and later adopted by the Y. M. C. A.

Stand, grasp the vaulting bar, jump to a momentary free front rest, then drop backward as though about to start a backward free circle. At



a point just below the bar, flex the thighs and then extend them forward, release grasp, and project yourself horizontally forward as high as the bar. Just before the feet strike the floor swing the arms forward to bring the body to an erect position.

Rules

A regulation bar or an adjustable (in height) horizontal bar must be used. The height of the bar shall be 4 feet 9 inches, measured from the top of the bar. The bar must not be raised or lowered. A line shall be drawn with the front edge extending from center to center of the up-rights and directly beneath the horizontal bar. This shall be the scratch line and all measurements must be made from the front edge of this line at right angles to the nearest mark made by any part of the person of the

competitor. The start shall be made with both feet on the floor back of the scratch line and the hands grasping the bar. Both feet must leave the floor at the same time and may not leave the floor more than once. The hands must be grasping the bar when the feet leave the floor. No part of the person of the athlete except the hands shall touch the bar. The author does not favor a limit on the style to use as given in this rule. Any style of start should be allowed, in which case the one-foot kick will be found best.

Some Undesirable Events

The running high and long dives are sometimes used, but although several mats may be used upon which to alight there is too much danger of injury to the spine to encourage this event. The snap under bar for height is also questionable. It is surprising how often athletes get ugly gashes on the forehead in pulling-up too close to the bar and thus striking the head against it. Such gashes often leave a permanent scar that disfigures the face.

CHAPTER VII

TRAINING IN GENERAL

Special training for each event is given in the preceding chapters.

At what age may a boy start to train for athletics in a serious way?

Boys may engage in field events at almost any age in an informal way, but it is not well to persuade them to undertake serious training until eighteen years of age. Up to that age any running that a boy does should be non-competitive, except for short distances (50, 60, or 70 yards). Jogging for longer distances is good to develop endurance, and should be encouraged, but long races are bad. Even men should never compete in long-distance races without several months of careful training.

At twenty-three an athlete is usually at his best and can engage in severe training that might be detrimental to one in his teens. There should be two months' preliminary training for a contest unless the athlete is already in good condition. The first two weeks should be general exercise daily.

It is now considered best to train athletes singly rather than in squads, because they differ much in vitality and nervous adjustment. There should, however, be considerable competition among the runners so as to develop poise and self-control. In important races the runners are likely to be nervous.

A difficulty with the single-training method is that there is no social fellowship and it is therefore likely to become burdensome. A wise trainer will at times get his men out singly and at other times in groups. When taken in groups the day's schedule should be that of the less vigorous.

The Workout

This term is used to denote the actual exercise an athlete takes in his daily training schedule. The average athlete is likely to overexercise, because it is enjoyable. Each one must find out what is best for him. This is the most important factor in getting in condition for a contest. Diet, rest, and the like are important, but workout is most important.

Although an athlete should be in good condition all the time he should not always be at top notch long before a meet, otherwise he is apt to go "stale," a condition of overtraining that shows itself in languor, depression, irritability, constipation, loss of weight, loss of appetite, skin erup-

tions, poor color, and frequent seminal emissions. The remedy for staleness is rest, or better still, change of environment, change of diet, and occupation, physic, and sweat-out.

The athlete should not train if he has a bad cold.

It is a good plan to rest from one to three days before a meet, but he should get his daily rubdown as usual.

A great deal of sleep should be taken. Rest is the best restorative.

A daily workout, bath, and rubdown constitute a training program.

If an athlete trains properly he will constantly improve in ability for many years.

The Rubdown

This is a kind of massage performed by a "trainer." It consists of kneading, slapping, and rolling the muscles, and rubbing the skin with a lotion. Some trainers use dilute alcohol (never apply wood or denatured alcohol) as a rubdown lotion; others use witch hazel, while others use preparations of their own. Some of these lotions are highly fragrant, which act more on the athlete's thought of well-being rather than as a physical benefit, yet the mental effect of such a thing must not be lost sight of. Some athletic supply firms sell rubdown lotions used by well-known trainers. (See notes on massage in paragraph on "Duties of Coach.") An occasional wet salt rub is invigorating.

On the day of the contest, just before his event is scheduled, the athlete should take some light exercise and, if possible, a rubdown so as to adjust the circulation and nerves to the maximum effort. In any case there must be some "warming-up" and, if there is no trainer, the athlete should take some light calisthenics, stretching, rubbing, and kneading the muscles himself, with plenty of deep breathing.

Habits

The athlete should keep good and regular hours and not indulge in any vice or weakness. Tobacco, drugs, liquor, and sex vice must be absolutely avoided, as well as any practice that he knows is not good for his peculiar make-up. Athletes lose more meets by not giving heed to these things than for any other cause. An athlete must lead a clean life to have an enjoyable and continuous athletic career.

An athlete must not worry or be under unnecessary nervous strain. A general air of cheer and a social spirit should prevail. The daily workout should be fun. Avoid making it drudgery.

DIET

The athlete's diet should be simple; consisting largely of cereals, vegetables, fruits, nuts, milk, and greens. Meat, fish, and eggs should be eaten sparingly but not neglected altogether.

College athletes sometimes eat at a "training table" that is regulated by the coach, but for the average athlete all he needs to do is to use common sense in eating. If he already eats plain foods he need make no great change. He should avoid heavy pastries, rich fried foods, condiments, stimulants (even tea, coffee, and cocoa), and especially those foods that he knows "do not agree with him."

A sample meal. Breakfast: fruit, cereal with milk, toast, boiled egg. Dinner: broth, small amount roast beef or lamb, plain vegetables, bread or toast, light dessert (tapioca, or gelatin, occasionally a little ice cream). Supper: milk toast, a little lean meat or fowl, fruit or sherbet.

Greens, lettuce, celery, cabbage (raw), egg yolk, tomatoes, contain valuable vitamins and should be freely eaten. So also do butter and milk, but these should be limited.

The meal just before a meet should be light; a glass of milk or a clear soup and two slices of toast is recommended.

Those who take on fat easily should eat little fats, oils, grease, butter, sugar, candy, starch foods (potatoes, rice, white bread, etc.).

Sleep

Athletes must get enough sleep. A bad night plays havoc with conditioning and is a calamity if just before a meet. Quiet, no hilarity, warm feet, tepid bath, and quiet relaxation, music, or humorous entertainment are all good, even the night before a meet so as to get the mind off the coming event.

Dress

The costume that an athlete wears during exercise and in meets consists of a light, close-fitting, sleeveless shirt (sometimes called a "jersey"), a light pair of loose-fitting cotton trousers that reach two inches above the knees (sometimes called "flappers"), a supporter (sometimes called a "jockstrap") used to "dress" oneself up close to the body and to hold down the shirt, and a pair of light snug-fitting shoes. Use chamois pushers instead of socks.

There are various grades and prices for these articles and the athlete is advised to get prices from a supply firm.

Track shoes are light, tight, low, leather slippers with six iron spikes that project an inch below the sole. Jumping shoes have two spikes in the heel in addition to the others. Spikes give the runner and jumper a great advantage, but are expensive. For this reason the policy of the Public School A. C. is to be commended. They do not allow any athlete to wear spikes in their meets, thus placing all on an equal basis. This should be adopted by all. If it should be it would also reduce the expense of a cinder track for outdoors and a board track for indoor contests. There is no more justice in allowing spikes in athletics than in allowing web devices in swimming.

The shirt is usually a flexible cotton weave with the emblem of the club made of felt sewed on the front, or a diagonal band of silk of club colors reaching from the right shoulder down and across the chest to the left hip.

There are several kinds of supporters; the ones mostly in favor are of elastic weave.

An important article of clothing for an athlete is a heavy bathrobe or ulster to keep him warm while he is waiting his turn during the progress of a meet. It is disastrous to get cold and stiff muscles. It is for this reason that an athlete can do better in warm than in cold weather. Do not stand or sit around after a workout.

INJURIES AND AILMENTS

Athletes sometimes get sprains, bruises, or skin abrasions.

Bruises

If slight, apply cold water at once. If severe, apply cloths wrung out in hot water. After about 30 minutes of this treatment apply a solution of laudanum and water and keep the part elevated as much as possible for hours or days. Also make hot applications twice daily until better.

Sprains and "Pulled Tendons"

If slight, give the part rest and massage. Keep it elevated for a day. If severe, apply hot or cold applications. Sometimes a bandage and even a splint will be found necessary. After a day or two apply alternately hot and cold water, then massage, then laudanum and water solution. Keep it bandaged when starting to use it.

Cuts

In skin abrasions, such as come from falling on the cinder track, the wound should be washed out with a germicide, such as iodine, alcohol, or mercuric chloride. Then apply an antiseptic dressing, such as oxide. It is best to get a physician to treat open wounds.

Sore Feet

To toughen the feet apply any of the following: stearate of zinc, benzoin, Allen's Foot-Ease, or Weston's Treatment (see below). For corns use Blue Jay plasters. Weak arches need to be strapped. For bruised heel use heel pad of sponge rubber.

If shoes chafe the feet put some adhesive plaster over the part only until the contest is over. Treat ingrown toenails by scraping thin on top and inserting a cotton plug under each corner to raise nail above the

flesh. Flat feet may be benefited by doing these exercises several times a day: (1) Raise on toes and turn feet outward 30 times; (2) sit and try to turn soles toward each other; (3) walk on the outside of the feet and pigeon-toed.

Weston's Treatment for Sore Feet.—Dissolve one teacup of Turk's Island rock salt in one quart of boiling water. Then add five quarts of cold water. Bathe the feet with this daily for five minutes. Dry them. Then apply alcohol (not wood alcohol), diluted half and half.

Crotch Itch

This is due to irritation caused by soiled supporters. These should be kept clean. Treat the itch with surgeons' soap.

Cramps

Due to overworked muscles or to extreme stretching. Treat by massage, rest, and hot applications.

Sunstroke

This is serious. The patient is hot and does not perspire. Remove him to a cool place. Remove or loosen his clothing. Reduce the temperature by ice or cold water to head, neck, chest, or give an entire cold bath. When he recovers have him drink cold water freely. Use no stimulants.

Heat Exhaustion

The patient is pale, depressed, has a weak pulse and clammy sweat. Remove him to a cool place. Loosen clothing. *Do not apply cold externally*, but have him sip cool drinks (water, tea, or coffee), or aromatic spirits of ammonia.

Dislocations and Fractures

These must be left to a physician. All that an amateur can do is to keep the part quiet and apply hot cloths to the injury until the doctor comes.

Sideache

This is usually due to vigorous exercise soon after eating. Rest is the only remedy. Sometimes slight cases are helped by slapping the spot vigorously.

Constipation

Execute all kinds of bending and twisting exercises. Hip-twist walking or heel-and-toe walking is good. Use abdominal massage. Eat bulky foods, bran bread, figs, regulin, and juicy fruits.

To Reduce Weight

This is a simple matter. Eat none or little foods that contain starch, fats, and sugars (no cereals, sweets, cream, butter, nuts, oils). One may eat three comfortable meals a day of lean meats, vegetables, greens, and acid fruits.

Colds

The best treatment for colds is to clean out the bowels, rest in bed, eat lightly (principally fruits), and drink plenty of water.

CHAPTER VIII

THE DUTIES OF A DIRECTOR, COACH, OR TRAINER

HINTS TO ATHLETIC PROMOTERS

The distinctive work of a coach is to get each athlete up to the greatest degree of efficiency by outlining his training schedule and habits and making sure that he observes them.

The athlete should be made to feel that he must obey instructions as thoroughly as a soldier. A clean life must be insisted upon.

The coach must study the characteristics and needs of each athlete. All athletes should not be put through the same routine. The slender nervous athlete must be handled differently from the phlegmatic one. He needs no "reducing schedule," has a desire to do too much, is likely to "go stale" soon, and takes longer to recover.

The coach should not permit youths and growing boys to train seriously for track events. He should be able to give preliminary exercises to develop inexperienced athletes.

He must be watchful of each athlete's health and "condition" at all times, daily checking up ability of athletes to react and recover. He must see that he is given the necessary medical examinations before starting to train and before trying contests. He must be able to recognize the signs of "staleness" (overtraining), to give the best modern rules of diet, and other hygienic facts. If he has no medical knowledge he can at least watch the athlete's weight, since weight is a good rough indicator of health. It is a good plan to have each athlete report daily any ailment, however slight. He will set a good example and teach good sportsmanship.

The coach should be able to judge what events an athlete is best fitted for. His general appearance will show this in some events. The following are the result of long experience:

1. Sprinters cannot be judged by their looks. Top-notchers have been of all shapes and sizes, except fat.
2. Slender, either small or tall, athletes make good distance runners. Men built like Samson or Hercules never make good distance runners.
3. The best hurdlers are usually tall, well built, but not heavy in appearance.
4. Weight-throwing requires big, heavy men. They may even be plump, but they must be agile.
5. Most of the best jumpers are tall, rangy men, like hurdlers.
6. Pole vaulting requires average size with smooth even well-developed muscles.
7. The best all-round athletes are tall and well built like the jumpers.

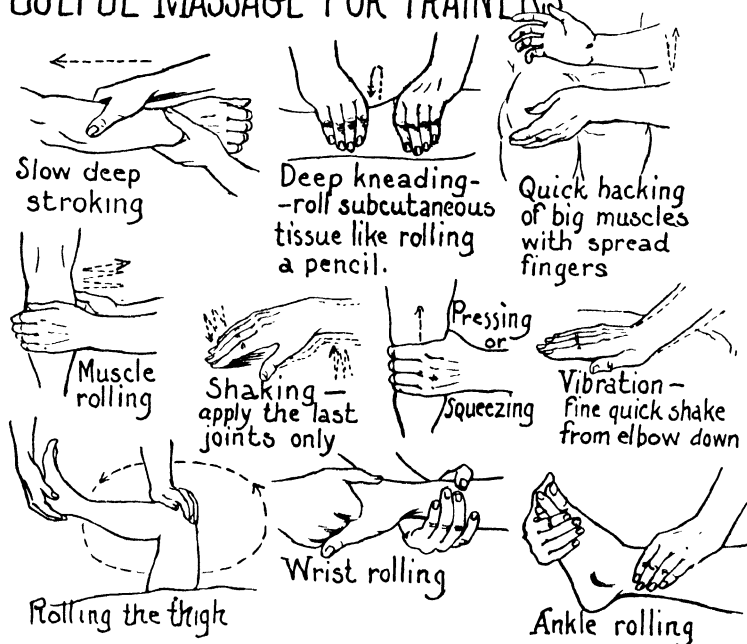
A good coach will develop a pleasing personality. It is not necessary to curse, growl, and bark at athletes. The wise coach will be kind and friendly as well as firm. Bluster and bluff will not pay in the long run. Athletes will not long endure rudeness or slave-driver tactics. A real athlete trains because he enjoys it. If he does not, there is little hope for him and no amount of bullying will make a good athlete of him.

Although a coach will profit by knowing all about first aid he certainly should know what to do for the conditions listed under "Injuries and Ailments."

The trainer should know how to apply massage properly. The usual mauling of the average "rubber" is to be condemned. These fellows seem to think that the more vigorously they rub, squeeze, and pound and the stronger-smelling lotion they use the better. That kind of treatment will only bruise an already overworked muscle. Every trainer should get instruction in massage from a professional masseur.

It is impossible to teach this subject in print, but some points may here be given that will be far better than the crude method of some trainers.

USEFUL MASSAGE FOR TRAINERS



Masseurs use vaseline on the bare skin rather than spirit lotions. This prevents unnecessary hair pulling and sores. If no lotion is used the movements are best done over close-fitting underwear. They are:

1. *Stroking.* This is used to begin and end a treatment. It is done with both arms straight, pressing down snugly with the hands. It soothes the muscles.
2. *Muscle kneading.* This is done by lifting a muscle with one hand and then squeezing it slowly upward with the other hand, using the palm with fingers and thumb straight.
3. *Muscle pressing.* This is done by encircling the arm or leg with both hands starting at the far end and pressing consecutively upward toward the trunk.
4. *Muscle rolling.* Grasp the arm or leg in both hands, as in muscle pressing, then roll the muscles with an alternate forward and backward movement of the hands.
5. *Shaking.* Grasp the hand or foot with both yours and shake it as if "shaking hands."
6. *Muscle hacking.* Hit the muscles lightly with the little fingers. All the other fingers are held extended and spread and at each blow they close upon each other as the parts of a slap-stick in a spring action. The blows are made across the muscle lightly with alternate hand.

To prevent passing on boils, masseurs or "rubbers" should wash hands thoroughly with surgeons' soap before each treatment.

An expert coach will, of course, be obliged to know the technic of athletic events to the minutest detail, the athletic rules, how to conduct meets, construct fields, and all other matters treated in this book. All in all the requirements of an athletic coach are not so simple as would at first appear.

PROMOTING ATHLETICS

Every wise physical director or coach will do much to promote athletic interest both in his organization and in the community where he lives.

Within his own organization he should hold frequent closed meets of various kinds, such as are described in another part of this book. In this way it is possible to schedule a meet every two or three weeks. Thus in one season a director may work up a live athletic interest.

With reference to promotion outside his club there is an almost limitless opportunity. This is particularly true of public playgrounds and Y. M. C. A's. and it is possible for a live director in any club to do much for wholesome recreation by adopting such a policy. It has been repeatedly shown that such a policy also helps his own work by giving his members more opportunities, and by creating in non-members a desire to join so as to get the benefit of further professional instruction.

Therefore, the wise director will promote each year one or more of the following possibilities in athletics:

An athletic meet for grammar schools, high schools, or Sunday schools; for manufacturing plants, wholesale jobbers, or retail firms; for labor unions, secret societies, or clubs of various kinds; or for city employees.

The method of starting something of this kind is for the director to decide which one he will attempt, call on the officers of the movement and talk to them about the plan, get their approval, call a meeting of representatives of each school, firm, or club interested and lay the plan before them as a body, have ready a list of events, suggestions as to time, place, expense, etc., and if they show any willingness to undertake it have them choose officers and committee at once and have a reporter there to write it up.

Perhaps the easiest to start with are the grammar schools, because boys of that age are easily enthused and the principals and teachers are usually ready to cooperate. After getting their approval he may visit each classroom of the ages decided upon, talk to the pupils about the meet, inducing them to train for the events, and getting some of the older experienced ones to train the others. In this way a school athletic club is often quickly developed.

In sections where as yet there is no athletic club the responsibility for promoting athletics may be assumed by anyone. If he is connected with any local organization, club, school, commercial or fraternal society, church, or grange he should try first to get the backing of that organization. He can then by persistent talk and newspaper agitation get the people to think about it, and such a preliminary educational propaganda will usually result in something definite.

The promoter should get as much information as possible from a nearby athletic organization and write to the following national headquarters:

The Amateur Athletic Union, 305 Broadway, New York.
The National Amateur Athletic Federation, 20 Broad St., New York.
The International Y. M. C. A., 347 Madison Ave., New York.
Playground Association of America, 315 Fourth Ave., New York.
National Collegiate Athletic Assn., 116 South Michigan Ave., Chicago.
I. A. A. A., 57 E. 56th St., New York.
Women's Athletic Committee, 2 W. 46th St., New York.

THE MANAGEMENT OF ATHLETIC MEETS

The details connected with the conduct of an athletic meet are many and it is only by means of a carefully prepared system that the worries of the Manager or the Games Committee will be lessened. The following list of details will be found useful:

Closed Meets

These require fewer details than open meets.

Select the type of meet and the events.

Inform the athletes by bulletins in the gym or clubrooms.

Inform the public by newspaper, posters, and window cards.

Entry blanks are not necessary, but if desired, they may be typewritten.

Use local officials, since that is a good way to develop competent ones. Report the results to the papers.

Dual Meets

The details are similar to those mentioned above, but are arranged by a committee from both competing clubs.

Try to get officials who are not members of either club.

Open Meets

First decide the kind of a meet—whether it is to be a championship, handicap, novice, or all-round meet.

Confer with the nearest competent athletic director if you are not acquainted with athletic matters.

Select a variety of events. Relay races are the most popular. Always provide some spectacular events to attract spectators.

Prepare and distribute entry blanks to clubs and athletes six weeks before the meet. Send for a sample entry blank to some athletic club. Remember that it should contain the name and place of the meet, by whom given, date, who may compete, list of events, when the blanks must be sent in (this is usually ten days before a meet), entry fee, list of prizes, name and address of the committee, and a statement that the meet is sanctioned. On it must be printed a blank form giving information about the athlete, such as, name, address, club he represents, registration number, and if it is a handicap meet he must give his last three records in each event he enters.

If it is a handicap meet the entries must next be sent to the official handicapper of the district. These handicaps must be published in the papers.

The programs must now be printed. These must contain a list of the events in their order, registration numbers, initials of the club of each athlete in each event, officers, and any other information to athletes and public. To finance the printing it is customary to get some printer to undertake the business of getting up the program and give the club that gives the meet a percentage on each ad that he gets. The printer then makes it a souvenir program and sells it. Sample programs should be obtained from prominent clubs.

Care should be used in deciding on prizes. Be sure to learn what kinds are allowed and what are not. The best prizes for big meets are gold and silver medals. Before deciding on prizes read the section on prizes given later in this book.

Advertise the meet in the papers. Get the sporting editor to put something in every day or two. Depend on news items. It is not necessary to have paid ads. Use posters and window cards to advertise the meet, and have the prizes displayed in some prominent store window.

To ensure a good attendance, plan events for special classes of athletes, such as high schools, lodges, and business firms. The athletes will draw attendance from their friends. Also have advanced sale of tickets. Get boys to sell tickets on commission. Some make a practice of mailing tickets to prominent citizens with a request for remittance.

Be careful to select competent and impartial officials. Get each to reread the latest rules. Do not select men for judges merely because they are prominent. Notify them two days before the meet.

Before the meet be sure to send free tickets to officials and to the papers and one to each athlete who is entered so that none are passed in without a ticket.

Handling the entries as they are sent in is a big job in a big meet and should have the entire time of a competent man. He enters the names in a book in the order in which they are received and numbers them. This is important because these are the numbers that the athletes will have in the meet and the lowest numbers are given preference in positions in races. This ensures an early entry list. The entry clerk also handles the entry fees, sends a ticket to each contestant, and makes out a list of events with names and numbers to be given to the printer of the program.

A very important matter is to have good accommodations for the spectators. Seats are necessary. Fences and strict marshals are necessary to keep the spectators from the field. Athletes too should have either dressing rooms or tents with benches and rubbing tables.

See that all details are attended to before the meet, such as scorer's table, prizes, press stand, sprint lanes, tapes, and measuring rods (8 feet for high jump, 12-foot rod for pole vault, steel tapes for broad jumps and weight events). For marking the distances, timepieces, starter's pistol (use .22 in practice and .32 in meet) and cartridges, white yarn for the finish tape, numbers for contestants and safety pins to pin them, numbered cards for drawing lanes, announcer's megaphone, officials' badges, scales (if weight is required), whistles for referee and starter, rule book, clipboards for officials, score sheets (may be purchased of supply dealers), hand rollers, sprinklers, straight edge for leveling jump pits, finish posts, forked stick for pole vault, all apparatus (hurdles, shot, hammer, extra hammer handles, discus, poles, javelin, cross-bars and pins, jump standards and official stickers to mark the approved ones), rakes, shovel, pick.

See that track and runways are leveled, rolled, tamped and jump pits spaded.

Mark out with line the starts, finish, relay-zones, lanes, balk lines, hurdle positions, weight circles, sectors for weight events, 3 feet intervals beside jump runways, touch-off zones for relays, space roped off for officials at finish. Paint jump block white.

See that all regular equipment is in good condition, such as finish posts for different events, batons for relays, take-off planks for broad jumps

and javelin throw, planks for pole vault hole and sides of jump pit, iron circles for weight events, toe board, have hurdles in convenient place, benches for field event contestants, weight event markers every 10 feet over 100, and sector flags.

Have a table for the trophies, rubbing benches, rooms or tents for athletes and assign them to teams.

Look after gate and stand details, admission tickets, tickets for athletes, officials, and press; have ushers, program boys with programs, ticket sellers and takers; have plenty of change for sellers.

A press table at the finish line is very important, with messengers to bring the judges' report to the reporters as soon as finished.

Begin the meet on time. Do not wait for tardy athletes. If there are many entries have the track and field events going on at the same time. It is impossible to arrange events so as to please all. Do not let the program drag. A meet should not last more than two hours and only a careful system faithfully carried out will make this possible.

Do not forget to thank the officials.

GENERAL RULES FOR OFFICIALS

List of Officials

The officials found necessary in conducting an athletic meet are: A Game Committee, one Referee, two or more Inspectors, four or more Judges at Finish, one Chief Field Judge, three or more Field Judges, three Timekeepers, one Judge of Walking, one Field Doctor, one Starter, one Clerk of the Course, one Scorer, one Press Steward, one Official Surveyor, one Marshal. If deemed necessary, assistants may be provided for the Timekeepers, Judge of Walking, Clerk of the Course, Scorer, Press Steward, and Marshal and an Official Announcer may also be appointed.

The Games Committee

In championship meets, the Games Committee shall be appointed by the Championship Committee.

For a local meet the committee is appointed by the club holding the meet. The Games Committee shall provide a place properly laid out and measured, furnish implements and equipment, provide the officials, provide for the expense of the meet, and shall have jurisdiction in all matters not assigned by rules to other officials.

Referee

The Referee shall enforce all the rules and decisions, and shall decide all questions relating to the actual conduct of the meeting, the final settle-

ment of which is not otherwise assigned by said rules. He alone shall have the power to change the order of events as laid down in the official program and to add to or to alter the announced arrangement of heats in any event. A Referee has no authority, after heats have been duly drawn and published in a program to transfer a contestant from one heat to another except when only enough runners appear for one heat. The Referee shall rule in case of fouls in races.

See details under rules for competition in track events. Also in case of misconduct of contestants (see "competitors," below).

Press Stewards

Press Stewards shall obtain from the Clerk of the Course and Scorer the names of all starters in each event, the names of all point winners, and the time or distances of each winner or record performance, and keep the press thoroughly informed of all doings of the meet.

Official Surveyor

The Official Surveyor shall survey the track and all the courses of the distances which are to be contested and furnish a statement of the same and the Games Committee or Referee before the games.

Marshal

The Marshal shall have full police charge of the enclosure and shall prevent any but officials and actual competitors from entering or remaining therein. He shall control his assistants and assign to them their duties.

The Scorer

The Scorer shall record the order in which each competitor finishes his event, together with the time furnished him by the Timekeepers, and the height or distance furnished him by the Field Judges. He shall keep a tally of the laps made by each competitor in races covering more than one lap, and shall announce by means of a bell, or otherwise, when the leading man enters the last lap. He shall control his assistants, and assign to them such of his duties as he may deem proper. In meets sanctioned by a Governing Committee the official scores must be sent to the official handicapper and to the chairman of the Registration Committee within two hours after a meet, also a list of all contestants in each event.

Official Announcer

He shall receive from the Scorer the results of each event and announce them by voice or by bulletin board.

Attendants

Except in distance races of five miles or over, no attendant or competitor who is not actually taking part in the race shall accompany any competitor on the mark or in the race, nor shall any competitor be allowed, without the permission of the Referee or Judges, to receive assistance or refreshment from anyone during the progress of the race.

Competitors

All competitors shall report to the Clerk of the Course immediately upon their arrival at the place of meeting, and shall be provided by that official with their proper numbers, which must be worn conspicuously by the competitors when competing, and without which they shall not be allowed to start. Each competitor shall inform himself of the time of starting, and shall be promptly at the starting point of each competition in which he is entered, and there report to the Clerk of the Course. If during any athletic contest, a competitor who shall refuse to obey the directions of the Referee or other proper officials, or who conducts himself in a manner unbecoming a gentleman, or offensive to the officials, spectators, or competitors, the Referee shall have the power to disqualify him from further competition at the meeting; and if he thinks the offense worthy of additional punishment, shall promptly make a detailed statement of the facts to the Registration Committee.

Use of Implements

A competitor may use his own implement, provided the same complies with the specifications hereinafter set forth. No competitor shall be permitted to use the implement of another competitor without the special consent thereto given by the owner of such implement.

Protests

Protests against any entered competitor may be made verbally or in writing to the Games Committee or any member thereof before the meeting, or to the Referee during the meeting. If possible, the Committee or Referee shall decide such protests at once. If the nature of the protest or the necessity of obtaining testimony prevents an immediate decision, the competitor shall be allowed to compete under protest, and the protest shall be decided by the Games Committee within one week, unless its subject be the amateur standing of the competitor or his eligibility to compete, in which case the Games Committee must report such protest within forty-eight hours to the member of the Registration Committee in whose territory the games are being held.

Duties of Other Officials

The duties of track officials (clerk, starter, inspectors, judges at finish, timekeepers, judge of walking) will be found under general rules for track events and the duties of field officials will be found under general rules for field events given in connection with the description of the technic of these events.

RECORDS

If an athlete breaks a record in an event in a meet sanctioned or approved by any of the governing bodies (A. A. U., Y. M. C. A., I. A. A. A. A., A. A. F., etc.) and the promoters of the meet desire that the record be accepted, it is necessary to furnish evidence to the headquarters of the governing board that the record is genuine.

They require that the record must have been made in an open meet, the run timed by three official timers, the field events measured with a steel tape by three official judges. These officials, together with three other witnesses, must furnish affidavits to that effect, also stating the place, time of day, condition of the weather, track, or field, direction of the wind, level or grade of the ground, weight, measurement, and material of the implements used, and correct time or distance. A. A. U. and Olympic records must be made by implements having their official stamp.

Official blanks are published by the governing bodies asking for the above requirements and the promoters of a meet should have these blanks at hand at a meet so that this requirement may be obtained upon the spot.

Lists of the best records of the Y. M. C. A. and the Public School Athletic League and Colleges may be found in their official handbooks.

The best records of the A. A. U. and their allied bodies, and the international and Olympic records, are to be found in the "Athletic Almanac," revised and published annually.

A Record Board

A good method of fostering a permanent interest in athletics in a local club is to have a permanent record board in the clubrooms upon which is painted each year the winner and record in each event. Another good plan is to paint the names of the events each on a separate board, 6 by 24 inches, and each year suspend from these a smaller piece, 2 by 24 inches, upon which is painted the year, the winner, and the record.

BEST OFFICIAL OUTDOOR AMATEUR RECORDS

*100-yard run, 9.5 seconds. Charles W. Paddock, 1926.

220-yard run, 20.5 seconds. Rollin Locke, 1926.

440-yard run, curved track, 47.4 seconds. J. E. Meredith, 1916.

440-yard run, straight track, 47 seconds. Max Long, 1900.

*Timed with tenth second timing watch.

Half-mile run, 1 minute 51.6 seconds. O. Peltzer (Germany), 1926.
 One-mile run, 4 minutes 10.4 seconds. P. Nurmi (Finland), 1923.
 Two- to ten-mile run. A. Shrubb (England), 1904 except 3, 4 and 5 by Nurmi (Finland), 1922.
 Standing high jump, 5 feet 5 $\frac{3}{4}$ inches. L. Loehring, 1913.
 Running high jump, 6 feet 8 $\frac{1}{4}$ inches. H. M. Osborn, 1924.
 Standing broad jump, 11 feet 4 $\frac{7}{8}$ inches. R. C. Ewry, 1904.
 Running broad jump, 25 feet 10 $\frac{7}{8}$ inches. DeHart Hubbard, 1925.
 Running hop, step, and jump, 50 feet 11 $\frac{1}{4}$ inches. A. Winter (Australia), 1924.
 High pole vault, 13 feet 11 $\frac{3}{8}$ inches. Charles Hoff (Norway), 1925.
 16-pound shot, 51 feet. Ralph Rose, 1909.
 16-pound hammer, 189 feet 6 $\frac{1}{2}$ inches. P. Ryan, 1913.
 56-pound weight, 40 feet 6 $\frac{3}{8}$ inches. M. McGrath, 1911.
 Discus throw, 156 feet 1 $\frac{3}{8}$ inches. J. Duncan, 1912.
 Javelin throw, 218 feet 6 $\frac{7}{8}$ inches. G. Lindstrom (Sweden), 1924.
 120-yard hurdle, 14.4 seconds. E. J. Thompson, 1920.
 220-yard hurdle, 23 seconds (straight track). C. R. Brookins, 1924.

These records are held by Americans except those in brackets.

For additional records see Spalding's Athletic Almanac.

For college records see handbooks of the I. A. A. A. and the N. C. A. A.

For Y. M. C. A., P. S. A. L. and other athletic bodies see their respective handbooks.

PRIZES

In promoting athletic meets the question of prizes is always a problem. The giving of prizes for athletic meets is as old as Greek athletics. At that time the prizes were of such value that the contests became contests for prizes rather than for pleasure, the natural result of which was unwholesome professionalism which, in turn, degenerated into brutality. This resulted in the overthrow of popular recreative athletics among the people in general.

To overcome this tendency the Amateur Athletic Union placed what it thought was a safe limit to the value of prizes. No money prize is allowed, and no general merchandise. They allow only wreaths, diplomas, banners, badges, medals, time-pieces, mantel ornaments, inscribed jewelry, silverware, and toilet service, but the first prize must not exceed \$35 in value, the second \$20 and the third \$10. The usual custom is to give gold medals for first prize, silver for second, and bronze for third and engraved loving cups for team prizes. Most organizations have stock die medals of attractive design.

The Intercollegiate Association appropriates \$50 for a bronze reproduction of the Borghese Gladiator for the winning team of their annual meet and cross-country run, one of which is for a U. S. flag. A \$15

medal is given to anyone who breaks a record. For the outdoor meet a gold medal is given to the winner of each event, a silver medal for second, a bronze for third. In case of a tie for first place each gets a medal that is half gold and half silver. If three tie each gets a medal, one-third of which is gold, one-third silver and one-third bronze. In case of a tie for second place each gets a medal half of which is silver and half bronze. In ties for third place each gets a bronze medal. All medals are engraved with event, time and place. In the cross-country runs each member of the winning team gets a gold medal, second silver, third bronze. In case of ties they are divided as above. In indoor meets the members of each team that wins or ties in first, second, or third places all get bronze medals.

From an experience of thirty-seven years as director of athletics the author is convinced that even the present practice of prize giving is detrimental to athletes and athletics in the following ways:

1. The prizes are still valuable enough to induce athletes to compete for them rather than for the joy of contest.
2. The more valuable the prize list the more attracted are the athletes.
3. Invariably the prizes are made the appeal to attract athletes to compete. This practice is so universal that it is doubtful if a director ever promoted a meet that the first question asked by his athletes was not, "What is there in it?"

When it is considered that the lowest price for a set of medals that will be found acceptable to athletes who are accustomed to prizes will be about \$7, and that the usual number of events is 12, making a total of \$84, it will be seen that the prize feature of athletics is a positive hindrance to the promotion of athletics by small clubs.

The prize evil could be eliminated if the governing bodies would adopt a plan of giving no prizes and charging no entry fees, and depend upon publicity as a sufficient reward. No one expects to get a medal every time he plays a game of ball. Why should he expect it in athletics? Promoters are responsible for giving athletes an altogether abnormal taste for "junk" that puts a burden upon themselves and so is a constant hindrance to healthy athletic sentiment. The folly of even winning medals is shown by the fact that the athlete is not allowed to sell them and to wear them is considered conceited. Thus the only thing that a self-respecting athlete can do is to hide them.

In addition to newspaper publicity the best kind of recognition of athletic ability is to have photographs of winning athletes and teams hung up in the gymnasiums or clubrooms, properly lettered. This gives a constant reminder to would-be athletes and is a healthy inducement to get into the "hall of fame."

CHAPTER IX

VARIOUS TYPES OF TRACK AND FIELD ATHLETICS

There are different kinds of athletics depending upon the object in mind. Every promoter of athletics needs to be thoroughly familiar with all of them so as to meet every need.

There are two main types of track and field athletics: Tests and contests.

TESTS

The primary object in tests is not to compete against others but to increase one's own athletic ability by trying to come up to a standard set up in advance, which if accomplished will show a person's motor efficiency. Tests are especially useful among boys and novices, to encourage all to try, and thus stimulate interest in athletics. The best-known tests are given below:

The New York City Public Elementary Athletic League Badge Tests

This was a pioneer in this line. The tests are held in May for all applicants who have a scholastic standing of at least B in effort, proficiency, and deportment and who are making a satisfactory effort to secure a good posture. The contestant must make the required record in all three events. There is no weight classification. Badges are given to those who pass. The events are as follows:

Class A—(bronze badge test): 60-yard run in $8 \frac{3}{5}$ seconds, pull-up (chinning) 4 times; standing broad jump 5 feet 9 inches.

Class B—(bronze-silver badge): 60-yard run in $8 \frac{3}{5}$ seconds; or 100 yards in 14 seconds; pull-up 6 times; standing broad jump, 6 feet 6 inches.

Intermediate School Events

Group A—Pull-up 7 times; 75-yard dash, 11 seconds; standing broad jump, 6 feet 6 inches.

Group B—(choose one), Running high jump with straight run, 3 feet 6 inches; basket ball toss starting from foul line, 7 goals in 30 seconds; running broad jump, $11 \frac{1}{2}$ feet.

High School Tests

Seventy-five percent badge test—Pull-up 9 times; running high jump, 4 feet 2 inches; 220-yard run in 28 seconds.

Ninety per cent silver enameled badge test—Pull-up 12 times; running high jump, 4 feet 6 inches; 220-yard run in 26 seconds.

GIRLS' PERSONAL PROFICIENCY TEST

To win the all-round athletic pin a girl must show proficiency in three of the following tests:

Any Two of These	School Grades, 3a to 4b	School Grades, 5a to 6b	School Grades, 7a to 8b	High School, Any 2
Basketball far throw from 6-ft. circle.....	20 ft.	30 ft.	40 ft.	50 ft. 60 ft.
Baseball throw.....				
Bat indoor baseball (30-ft. pitch).....	2 hits out of 5	3 hits out of 5	4 hits out of 5	
Basketball goal throw.....	1 out of 5 from 8-ft. mark 20 ft.	2 out of 5 from 10-ft. mark 30 ft.	3 out of 5 from 10-ft. mark 35 ft.	
Punch basketball for distance....				
Pitch indoor baseball over home plate.....	1 fair out of 5	2 fair out of 5	3 fair out of 5	
Run 50 yards.....	9 sec.	8½ sec.	8 sec.	7½ sec.
One of These				
Walk.....	2 miles	3 miles	5 miles	10 miles
Swim.....	a. Push-off and float b. Same, and 5 good strokes	Pass 2d. Red-cross test	P. S. A. L. test	
Dance satisfactorily.....	a. 32 measures to music b. Run 32 measures	Polka 32 measures Schottische 32 measure	One complete folk dance	
Skating.....	a. Ice, 10 strokes and quick step b. Same on rollers	20 strokes 20 strokes	Outer-edge 6 Forw. 10, turn and back, 10	
Bicycle ride.....	2 miles	3 miles	5 miles	
Rope skipping.....	a. Enter front and skip 10 b. Enter rear and skip 10	Same with double rope	2 steps of Irish lilt	

PLAYGROUND ASSOCIATION ATHLETIC BADGE TEST FOR BOYS

The Playground and Recreation Association of America has adopted the following standards as a test of athletic ability for boys:

First Test

1. Pull-up (chinning), 4 times; or rope climb, using both hands and legs, standing start, no spring, 12 feet.

2. Standing broad jump, 5 feet 9 inches.
3. 60-yard dash, 9 seconds; or 50-yard dash, 8 seconds.
4. Baseball throw (accuracy), 3 strikes out of 6 throws at 40 feet; or baseball throw (distance), 130 feet.

Second Test

1. Pull-up (chinning), 6 times; or rope climb, using both hands and legs, standing start, no spring, 16 feet.
2. Standing broad jump, 6 feet 6 inches; or running broad jump, 12 feet.
3. 60-yard dash, 8 seconds; or 100-yard dash, 13 $\frac{2}{5}$ seconds.
4. Baseball throw (accuracy) 3 strikes out of 5 throws at 45 feet; or baseball throw (distance), 195 feet.

Third Test

1. Pull-up (chinning), 9 times; or rope climb, using hands only standing start, 16 feet.
2. Running high jump, 4 feet 4 inches; or running broad jump, 14 feet.
3. 220-yard run, 28 seconds; or 100-yard dash, 12 $\frac{3}{5}$ seconds.
4. Baseball throw (accuracy), 3 strikes out of 5 throws at 50 feet; or baseball throw (distance), 220 feet; or 8-pound shot put, 28 feet.

It has been found that boys of 12 years of age should be able to qualify for the badge under the first test, elementary school boys of thirteen years and over for the second test, and high school boys for the third test. It does not seem, however, that the different standards should be limited to these age groups. Accordingly, no age or even weight limit is fixed. Any boy may enter any test at any time. The target for baseball accuracy throw is 15 by 24 inches.

PLAYGROUND ASSOCIATION ATHLETIC BADGE TEST FOR GIRLS

First Test

1. Balance beam walk 24 feet on a beam 12 feet long (a 2 by 4 on edge).
2. Potato race, 22 seconds; or all up Indian club race, 30 seconds; or 50-yard dash, 8 seconds.
3. Basketball distance throw, 35 feet; or 12-inch indoor ball accuracy throw (2 strikes out of 5 at 25 feet).
4. Volley ball serve, 2 in 5; or tennis serve, 3 in 6; or basket ball goal throw from 10-foot line, 2 in 5.

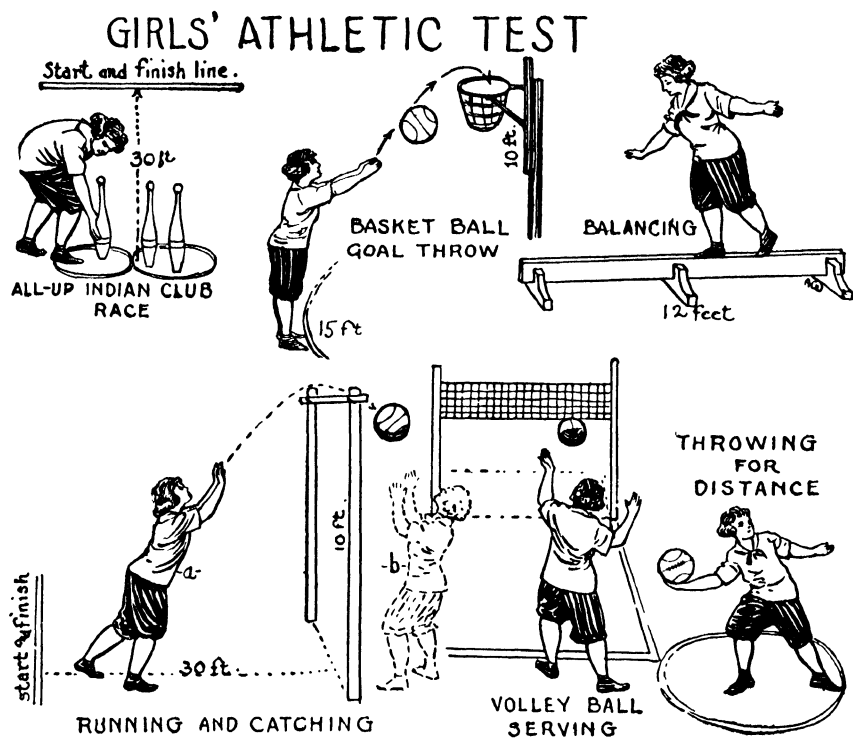
Second Test

1. Balance beam walk, 24 feet with book on head, add full knee bend once.
2. Potato race, 20 seconds; or all-up Indian club race, 28 seconds; or run and catch, 19 seconds; or 50-yard dash, 7 $\frac{3}{5}$ seconds.
3. Basketball distance throw, 45 feet; or 12-inch indoor ball accuracy throw, 3 strikes out of 6 throws at 30 feet.
4. Volley ball serve, 3 in 6; or tennis serve, 3 in 5; or basketball goal throw at 12 feet, 3 in 6; or 12-inch indoor ball throw and catch, 2 errors allowed.

Third Test

1. Balance beam walk with $\frac{3}{4}$ -pound book on head and full knee bend 3 times.
2. Potato race, 18 seconds; or run and catch ball, 17 sec.; or 50-yard dash, 7 $\frac{1}{5}$ seconds.

3. Basketball distance throw, 55 feet; or 12-inch indoor ball accuracy throw, 3 in 5 at 36 feet.
4. Volley ball serve, 3 in 5; or tennis serve, 3 in 4; or basket ball goal throw from 15 foot line, 3 in 5; or 12-inch indoor ball throw and catch, one error allowed.



Rules for the Above Events

The test is open to girls of all ages. Events must all be done at one time and judged by a responsible adult.

1. Balancing Tests

First Test

Start at center. Walk forward to end. Walk backward to center. Quarter turn. Full knee bend, rise and complete the turn. Walk forward to end. Half turn and walk forward to center.

Second Test

Same as first with a $\frac{3}{4}$ -pound book on head.

Third Test

Same as second having hands on hips and do three full knee bends.

2. Runs Are Started with Arm Drop

Potato race, 70-yards, using two $2\frac{1}{2}$ -inch objects. Mark a 12-inch square in front of the start line. Five yards beyond, a 6-inch circle, and 5 yards farther another (measured center to center). Place a block in each circle. From the start get the first block and place into square. Get the last block and touch the square with it and then replace it in the far circle. Get the remaining block and place it in the first circle, then run to start line.

3. All Up Indian Club Race

Make two 3-foot circles touching, in one of which stand 3 clubs. From starting line (30 feet away) run and transfer all clubs to other circle, singly, then return to start; make three such trips.

4. Sixty Yard Run and Catch Ball

Stretch rope ten feet high 30 feet from start. With basket or volley ball run and toss over line and catch it, then run to start; make three such trips.

5. Basketball Throw for Distance

Use any kind of a throw, with or without run. Three trials.

6. Twelve Inch Indoor Ball Throw for Accuracy

Suspend a 15 by 24 inch target two feet from the floor and 30 feet away. Use any kind of throw, starting with both feet on the line and taking one step. Five throws allowed to hit.

7. Volley Ball Serve

From 24 feet serve over an 8-foot high rope or net so that it will strike within a 10 by 10 foot area 10 feet from the net. Serve in any manner. Five trials allowed.

8. Tennis Serve

Mark a space on the wall $13\frac{1}{2}$ feet long by 30 inches wide and three feet from the floor. The same sized rectangle is marked on the ground 38 feet away. Or on a tennis court stretch another net 30 inches above the first. Serve between the nets. Five trials allowed.

9. Basketball Toss as in the Regular Free Throw. Five throws allowed.

10. Indoor Baseball Throw and Catch

Mark out a 36-foot diamond and a box 30 feet from home. A baseman is on each base and contestant at home. Contestant catches a pitched ball from the pitcher in the box, then throws it to each baseman in turn. Each player must have one foot on the base. Use 12-inch ball. One error allowed. Two trials allowed.

TRACK AND FIELD ATHLETICS

SAMPLE OF PUBLIC SCHOOLS EFFICIENCY ATHLETIC TESTS

PHILADELPHIA (STECHEK)

(Age—Aims—Events—Required)

Event	Sex	8	9	10	11	12	13	14	15
Running 50 yards (seconds fifths).....	B	9.0	8.4	8.3	8.2	8.1	8.0	7.4	7.3
	G	9.3	9.2	9.1	9.0	8.4	8.3	8.3	8.3
Standing broad jump (feet and inches).....	B	3.4	3.8	4.0	4.3	4.6	4.9	5.0	5.3
	G	3.0	3.2	3.4	3.6	3.8	3.1	4.0	4.1
Basketball far throw (feet)...	B	14	16	18	20	23	24	27	29
	G	12	14	16	18	19	21	22	23
Chinning, knee raising.....	B	...	...	...	1	2	3	4	4
	G	...	...	...	16	25	28	30	30

EVENTS AND STANDARD FOR EFFICIENCY TESTS (ELECTIVE)

Purpose: To stimulate interest and further participation in athletics among pupils who have passed the track and field Age-aims.

Test I

(Pupils under 16 years who have passed Age—Aims)

Boys

1. Standing broad jump (6 feet)
2. Basketball far throw (30 feet) (over-head)
3. 50 yard dash ($7\frac{3}{4}$ seconds)
4. Baseball throw (50 feet)

GIRLS

1. Standing broad jump (5 feet 3 inches)
2. Basketball far throw (27 feet) (over-head)
3. 50 yard dash (8 seconds)
4. Baseball throw (35 feet)

Test II

(Winners of Test I, under 16 years)

Boys

1. Standing broad jump (6 feet 6 inches)
2. Basketball far throw (55 feet) (round arm)
3. 75 yard dash ($11\frac{1}{8}$ seconds)
4. Baseball throw (75 feet)
5. Chinning (4 times)

GIRLS

1. Standing broad jump (5 feet 9 inches)
2. Basketball far throw (45 feet) (round arm)
3. 50 yard dash ($7\frac{3}{4}$ seconds)
4. Baseball throw (50 feet)
5. Chinning (once)

Test III

(Winners of Test II, under 16 years)

Boys

1. Standing broad jump ($7\frac{1}{2}$ feet)
2. 100 yard dash (13 seconds)
3. Chinning (8 times)
4. Baseball throw (100 feet) •
5. 8 pounds shot (30 feet)
6. Swim (220 yards)

GIRLS

1. Standing broad jump (6 feet 3 inches)
2. 75 yard dash ($11\frac{1}{8}$ seconds)
3. Chinning (2 times)
4. Baseball throw (75 feet)
5. Basketball goals (2 out of 5)
6. Swim (220 yards)

REWARDS.—Test I—Bronze seal certificate

Test II—Silver pin

Test III—Gold pin

BALTIMORE (BURDICK) INDOOR EFFICIENCY TEST REQUIRED

(Events for Classes and Basis for Scoring)

Events, 80-lb. Class	0 Points	Honor Standard	100 Points	Basis of Scoring Points
1 potato race.....	9 s.	7 s.	5 s.	$\frac{1}{8}$ second—5
3-potatoes race.....	24 s.	20 s.	16 s.	$\frac{1}{8}$ second—2½
Standing broad jump...	4 ft. 8½ in.	5 ft. 9 in.	6 ft. 9½ in.	$\frac{1}{4}$ inch—I
Target throw.....	0	50 points	100 points	*
95-lb. Class				
1 potato race.....	8 s.	6 s.	4 s.	$\frac{1}{8}$ second—5
4-potatoes race.....	28 s.	24 s.	20 s.	$\frac{1}{8}$ second—2½
Standing broad jump...	5 ft. 2½ in.	6 ft. 3 in.	7 ft. 3½ in.	$\frac{1}{4}$ inch—I
Target throw.....	0	50 points	100 points	*
110-lb. Class				
2-potatoes race.....	13 s.	11 s.	9 s.	$\frac{1}{8}$ second—5
5-potatoes race.....	33 s.	29 s.	25 s.	$\frac{1}{8}$ second—2½
Standing broad jump...	5 ft. 8½ in.	6 ft. 9 in.	7 ft. 9½ in.	$\frac{1}{4}$ inch—I
Target throw.....	0	50 points	100 points	*
125-lb. Class				
2-potatoes race.....	12 s.	10 s.	8 s.	$\frac{1}{8}$ second—5
6-potatoes race.....	38 s.	34 s.	30 s.	$\frac{1}{8}$ second—2½
Standing broad jump...	6 ft. 2½ in.	7 ft. 3 in.	8 ft. 3½ in.	$\frac{1}{4}$ inch—I
Running high jump.....	2 ft. 8½ in.	3 ft. 9 in.	4 ft. 9½ in.	$\frac{1}{4}$ inch—I
8-lb. shot put.....	15 ft.	27 ft. 6 in.	40 ft.	3 inches—I
Unlimited Weight Class				
3-potatoes race.....	19 s.	17 s.	15 s.	$\frac{1}{8}$ second—5
8-potatoes race.....	64 s.	54 s.	44 s.	$\frac{1}{8}$ second—I
Standing broad jump...	6 ft. 8½ in.	7 ft. 9 in.	8 ft. 9½ in.	$\frac{1}{4}$ inch—I
Running high jump.....	2 ft. 10½ in.	3 ft. 11 in.	4 ft. 11½ in.	$\frac{1}{4}$ inch—I
12-lb. shot put.....	17 ft.	29 ft. 6 in.	42 ft.	3 inches—I
Fence vault.....	4 ft. 1 in.	5 ft. 1½ in.	.....	$\frac{1}{8}$ inch—I

* Target throw—Bull's-eye, 25; inner, 15; magpie, 10; outer, 5 points.

OUTDOOR EFFICIENCY TEST

(Events for Classes and Basis for Scoring)

Weight Classes, 80-lb. Class	0 Points	Honor Standing	100 Points	Basis of Scoring Points
50-yard dash.....	10 s.	8 s.	6 s.	$\frac{1}{8}$ second—5
Standing broad jump...	3 ft. 5 in.	5 ft. 6 in.	7 ft. 7 in.	$\frac{1}{2}$ inch—1
Running broad jump....	5 ft. 10 in.	10 ft.	14 ft. 2 in.	1 inch—1
Baseball throw.....	70 ft.	120 ft.	170 ft.	1 foot—1
95-lb. Class				
75-yard dash.....	13 s.	11 s.	9 s.	$\frac{1}{8}$ second—5
Standing broad jump...	3 ft. 11 in.	6 ft.	8 ft. 1 in.	$\frac{1}{2}$ inch—1
Running broad jump....	6 ft. 10 in.	11 ft.	15 ft. 2 in.	1 inch—1
Baseball throw.....	100 ft.	150 ft.	200 ft.	1 foot—1
100-lb. Class				
100-yard dash.....	16 s.	14 s.	12 s.	$\frac{1}{8}$ second—5
Standing broad jump...	4 ft. 5 in.	6 ft. 6 in.	8 ft. 7 in.	$\frac{1}{2}$ inch—1
Running broad jump....	7 ft. 10 in.	12 ft.	16 ft. 2 in.	1 inch—1
Running high jump....	2 ft. 8 $\frac{1}{2}$ in.	3 ft. 9 in.	4 ft. 9 $\frac{1}{2}$ in.	$\frac{1}{4}$ inch—1
Baseball throw.....	130 ft.	180 ft.	230 ft.	1 foot—1
125-lb. Class				
100-yard dash.....	15 s.	13 s.	11 s.	$\frac{1}{8}$ second—5
Standing broad jump...	4 ft. 11 in.	7 ft.	9 ft. 1 in.	$\frac{1}{2}$ inch—1
Running broad jump....	8 ft. 10 in.	10 ft.	17 ft. 2 in.	1 inch—1
Running high jump....	2 ft. 11 $\frac{1}{2}$ in.	4 ft.	5 ft. $\frac{1}{2}$ in.	$\frac{1}{4}$ inch—1
Baseball throw.....	145 ft.	195 ft.	245 ft.	1 foot—1
8-lb. shot put.....	15 ft. 6 in.	28 ft.	40 ft. 6 in.	3 inches—1
Unlimited Class				
100-yard dash.....	14 s.	12 s.	10 s.	$\frac{1}{8}$ second—5
Standing broad jump...	5 ft. 5 in.	7 ft. 6 in.	9 ft. 7 in.	$\frac{1}{2}$ inch—1
Running broad jump....	9 ft. 10 in.	14 ft.	18 ft. 2 in.	1 inch—1
Running high jump....	3 ft. 3 $\frac{1}{2}$ in.	4 ft. 4 in.	5 ft. 4 $\frac{1}{2}$ in.	$\frac{1}{4}$ inch—1
Baseball throw.....	160 ft.	210 ft.	260 ft.	1 foot—1
8-lb. shot put.....	22 ft. 6 in.	35 ft.	47 ft. 6 in.	3 inches—1

BOY SCOUTS' ATHLETIC MERIT BADGE TEST

If Boy Scouts can make the records given below in their weight class they are awarded the Athletic Merit Badge.

The 90-pound Class must qualify in 7 of the first 9 on the list.

The 110-pound Class must qualify in 10 of the first 12 on the list.

All others must qualify in 11 of the 13 events.

Events	Under 90 Pounds	Under 110 Pounds	Under 125 Pounds	Under 140 Pounds	Over 140 Pounds
1 Running broad jump.	12 ft.	13 ft.	14 ft.	15 ft.	16 ft.
2 Running high jump.	3 ft. 11 in.	4 ft. 1 in.	4 ft. 4 in.	4 ft. 7 in.	4 ft. 10 in.
3 Standing broad jump.	6 ft. 6 in.	7 ft.	7 ft. 6 in.	8 ft.	8 ft. 6 in.
4 Standing high jump.	3 ft. 2 in.	3 ft. 4 in.	3 ft. 6 in.	3 ft. 8 in.	3 ft. 10 in.
5 Pull-up (chin).....	5 times	7 times	9 times	11 times	13 times
6 20-yard swim.....	20 sec.	18 sec.	16 sec.	14 sec.	12 sec.
7 40-yard swim.....	40 sec.	39 sec.	38 sec.	37 sec.	36 sec.
8 50-yard run.....	7½ sec.	7½ sec.	7 sec.	6½ sec.	6½ sec.
9 8-potato race.....	45 sec.	43 sec.	41 sec.	39 sec.	37 sec.
10 Put 8-lb. shot.....	.....	25 ft.	30 ft.	35 ft.	40 ft.
11 Push up from floor...	.....	11 times	13 times	15 times	17 times
12 Rope climb.....	.....	14 sec.	12 sec.	10 sec.	8 sec.
13 100-yard dash.....	.....	.....	13 sec.	12½ sec.	12½ sec.

The rules of the Athletic League of National Association govern these tests.

PIONEERS' ATHLETIC MERIT BADGE TEST

This is the track and field test of a program that is promoted by the Boys' Work Department of the Young Men's Christian Association for training boys of 12 to 14 years of age in Christian citizenship.

The rules require that the participants to win the merit badge must equal the records that are starred (*) in the following list under their weight class and must select four other events of the list to equal ten in all. The Y. M. C. A. rules govern.

Events	80-lb Class (60 to 80 lbs.)	95-lb. Class	110-lb. Class	125-lb. Class	Unlimited Weight Under 19 Yrs
1-lap potato race. . .	4½ sec.	4 sec.			
3-lap potato race. . .	*16½ sec.	.....	.....	.....	15 sec.
50-yard dash.....	6½ sec.				
75-yard dash.....	*10½ sec.	9½ sec.			
Standing broad jump.	7 ft. 1 in.	7 ft. 7½ in.	8 ft.	8 ft. 7 in.	8 ft. 11½ in.
Pull-up.....	*4 times	*5 times	*6 times	7 times	*8 times
Running broad jump.	*14 ft. 2 in.	*15 ft. 2 in.	16 ft. 2 in.	17 ft. 2 in.	18 ft. 2 in.
One-day hike.....	*8 miles	*10 miles	*12 miles	14 miles	*18 miles
Century hike (100 m.)	*1 year	*1 year	*6 mo.	6 mo.	*6 mo.
Baseball throw.....	130 ft.	154 ft.	178 ft.	230 ft.	270 ft.
75-yard dash.....	.....	.....	9½ sec.		
100-yard dash.....	.....	*12½ sec.	*12 sec.	11½ sec.	10½ sec.
4-lap potato race.....	.....	*22 sec.			
2-lap potato race.....	.....	.....	9½ sec.	9½ sec.	
5-lap potato race.....	.....	.....	*27 sec.		
Running high jump..	4 ft. 1½ in.	4 ft. 5½ in.	*4 ft. 7½ in.	*4 ft. 9½ in.	*5 ft. 1½ in.
Shot put.....	.....	.....	34 ft.	37 ft.	42 ft.
6-lap potato race.....	.....	.....	.....	*33 sec.	*32½ sec.
220-yard dash.....	.....	.....	.....	28 sec.	*26 sec.
8-lap potato race.....	.....	.....	.....

Sample College Efficiency Tests

Many colleges and institutions require examinations and tests of various kinds upon entering. The usual practice is to give strength tests. In addition some give athletic tests for the purpose of classifying athletic ability and to note improvement from time to time. Below are selections from various colleges:

Chicago University

Passes if he does well in all events or well at four and fair in fifth:

One lap run (13 laps to mile).

Running high jump, 3.10, 4.2, 4.6 (feet and inches).

Bar vault, 4, 4.6, 5.

Balance—walk across narrow edge of board.

Parallel bar exercise—fairly complicated.

Cornell University

Run $\frac{4}{9}$ mile in $2\frac{1}{2}$ minutes. Climb 12-foot rope, hand over hand. Jump within 2 feet of height. Fence vault within one foot of height. Swim 100 feet.

University of California

Vault shoulder high. Pull up, three. Jump 14 feet. Run 100 yards in 13 seconds. Dive head first to ground while running and roll to feet.

University of Minnesota

Bar vault shoulder high. Run high jump 4 feet. 100-yard dash 12 seconds. Half-mile run 3 minutes. Swim 120 feet. Life saving test. Exercises on buck and parallel bars.

University of Michigan

Chin 5 times. Dip 5. Bar vault 5 feet. Rope climb 13 seconds. 50-yard dash 7 seconds. Stand broad jump $6\frac{1}{2}$ feet. High jump $3\frac{1}{2}$ feet.

Princeton University

100-yards dash, 14 seconds. Baseball throw, 90 feet at a 6 foot target. Run broad jump 12 feet. Fence climb 8 seconds. Heart test.

Miami University

	10 Points	8 Points
100-yard dash.....	12 seconds	$12\frac{1}{2}$ seconds
Running high jump.....	$4\frac{1}{2}$ feet	4 ft. 4 inches
Bar vault.....	5 feet	$4\frac{1}{2}$ feet
Rope climb.....	12 seconds	14 seconds
Baseball throw.....		

Must score 40 points to pass.

University of Southern California

	Grade 3	Grade 2	Grade 1
100-yard dash.....	13½ seconds	12½ seconds	11½ seconds
Running broad jump.....	14 feet	15½ feet	17 feet
Fence vault.....	Nipples	Shoulders	Eyes
High dive.....	3 feet	4 feet	5 feet
Medicine ball race.....	23 seconds	21½ seconds	20½ seconds

Ohio State University

Grade	20-foot Rope Climb, Kneel	Running High Jump	118-yard Run (one lap)	Bar Vault
A	12 sec. or better	4½ ft.	15½ sec.	5 ft.
B	12 to 16 sec.	3 ft. 10 in.	16½ to 16¾ sec.	4 ft. 4 in.
C	16 to 20 sec.	3 ft. 6 in.	16¾ to 17½ sec.	3 ft. 8 in.
D	20 sec. and over	Less than 3 ft. 6 in.	17½ or over	Less than 3 ft. 8 in.

National Collegiate Athletic Association

At the 1922 meeting of this body a Freshman's Efficiency test was adopted. It will award annually a loving cup to the freshman class having the highest average score for eighty percent of the class. It will also give a certificate to the three colleges in each district with the highest average score, all using the following events and scoring: 100-yard dash (no spikes) in 13 sec., 1 point; 12 2/5 sec., 2 points; 11 3/5 sec., 3 points. Run high jump, 3 1/2 feet, 1 point; 3-11, 2 points; 4-3, 3 points. Run broad jump, 12 feet, 1 point; 13 feet, 2 points; 14-4, 3 points. Bar vault, 4 feet, 1 point; 4-6, 2 points; 4-9, 3 points.

College Athletic Fraternity

The Sigma Delta Psi Fraternity. The officers of each chapter include the college president and a Committee of Certification composed of five members of the faculty, one of whom must be the director of physical training. This links the fraternity with the college. A majority of this committee conducts the contests. Before one is eligible to join this fraternity he must have the following standard in *all* of these events:

Junior Class

100-yard dash in 12 seconds; 220-yard low hurdles with none over-turned, 33 seconds; running high jump 4 feet 6 inches, running broad jump 15 feet; 16-lb. shot 25 feet; pole vault 7 feet 9 inches; throw baseball 200 feet on the fly; punt football 90 feet on the fly; swim 50 yards without floating or resting; 2 mile run 14 minutes; 10 mile walk 2 1/2 hours. He must have an erect carriage (is observed when he is not aware of it).

Full Membership

100-yard dash 11 $\frac{3}{5}$ seconds; 220-yard hurdles 31 seconds; running high jump 5 feet; running broad jump 17 feet; 16-lb. shot 30 feet for men of 160 lbs. and more (for others—160 is to the athlete's weight as 30 is to x); pole vault 8 feet 6 inches; baseball throw 250 feet; football punt 120 feet; swim 100 yards; 2 mile run 12 minutes 15 seconds; 10 mile walk 2 hours; maintain the hand balance 10 seconds without moving and must have an erect posture. When the candidate has received the 'varsity letter in any sport he may substitute it for any one of the above events except swimming.

National Amateur Athletic Federation Physical Efficiency Tests

At the 1922 meeting the following athletic ability standard was adopted:

100-yard dash—5 points for each $\frac{1}{5}$ sec. lower than 15 $\frac{4}{5}$ sec.

Running long jump—5 points for each 6 inches beyond 7 feet.

Running high jump—5 points for each 2 inches above 2 feet 2 inches.

Bar vault—5 points for each 2 inches above 3 feet.

The Army Physical Efficiency Test

This test for soldiers is based upon conditions that they are likely to meet in action. The events are:

100-yard dash in 14 seconds.

Running broad jump of 12 feet.

Hand grenade throw for 30 yards into a target 10 feet square.

Climb over an 8-foot smooth fence.

Obstacle race, of 100 yards, in which he jumps a 3-foot hurdle at 10 yards, runs up a 5-foot parapet, then at 25 yards he jumps a trench 10 feet wide and 3 feet deep, then at 45 yards he goes through a 10-foot smooth wire entanglement, then at 70 yards he crosses a 20-foot wide trench on a one-foot wide plank, at 85 yards he climbs an 8-foot fence, then runs 15 yards to the finish.

There are three grades to this test, all using the same events and the same figures but under different conditions:

Grade 1 is given at enrollment, done in service uniform but without blouse and service equipment.

Grade 2 is given after one month, carrying a rifle.

Grade 3 is given after three months, without blouse but in light marching equipment and carrying a rifle. He must also pass a satisfactory test in bayonet, hand fighting, and boxing.

Note.—Those interested in motor ability tests should get the latest report of the American Physical Education Association on the subject (Box G, Highland Station, Springfield, Mass.).

CONTESTS

Athletic contests are trials of athletic skill, strength, and endurance between athletes. For convenience of classification, contests may be divided into (1) Championships and (2) Handicaps.

CHAMPIONSHIPS

In these all athletes are on an even basis. No handicaps are given, all starting from the same mark. For this reason they are often called "scratch events." Championships may be divided into (a) Individual, and (b) Team, but both are usually combined in the same meet. Individual championships determine the best athletes in each event or in any of the events. In the latter case they are known as "all-round" meets and will be considered later. Several governing bodies publish lists of events that they recognize as standard. These differ in kind or arrangement and for that reason should be considered as suggestive to promoters.

Y. M. C. A. Championships

This body recognizes the largest list of events, but does not require, as some others do, that all of the events shall be included in a single meet. A selection may be made by the Games Committee from the following:

Runs (out and indoor): 50, 75, 100, 150, 220, 300, 880, and 1320 yard, 1-mile, 2-mile.

Relays: 440-yard, 880-yard, 1-mile, 2-mile.

Hurdles: 120-yard, 220-yard.

Runs (indoor): 20-yard, 40-yard, 60-yard, 8-potato, 440-yard, potato, and relay potato.

Weights: 8, 12, and 16 pound shot; 12 and 16 pound hammer, discus both ancient and modern.

Jumps: 1, 2 and 3 standing broad; standing hop, step and jump, standing high, running high, running broad, pole vault both high and far.

Indoor events: Springboard jump, high dive, springboard dive, long dive, high kick, double kick, hitch and kick, snap under bar (both high and far), fence vault, ring vault, rope vault, and rope climb.

A. A. U. National Championship Meets

These are held annually in both senior and junior classes, also an indoor championship and a cross-country run. The senior class is for any registered amateur athlete. The junior class is for those who have not won first place in any event at any of the following meets: A. A. U. National Championships, International Olympics, I. A. A. A. Pacific Coast Intercollegiate Conference, Canadian Championships, Championships of any country, National or International champion cross-country run. The moment an athlete wins first place in any event in any of the

above meets he is no longer a junior in any meet, except that if he won first place in cross-country or relay teams, it does not disqualify him as a junior in other events. A junior may compete in both junior and senior events on the same day but a senior is limited to senior events. In cross-country runs the junior class is open to those who have won first place in races of two miles and over in any of those meets.

The following is a list of the events in the annual A. A. U. championships in the order in which they are run.

Track Events: 100-yard dash trial heats, 100-yard semi-finals, 120-yard hurdle trials, 120-yard hurdle semi-finals, one mile run, 440-yard run trials, 100-yard dash final, 120-yard hurdle final, three-mile walk, 440-yard hurdles trials, 220-yard run trials, 220-yard run semi-finals, 440-yard hurdle finals, 220-yard hurdle trials and finals, six mile run, 220-yard run final, 220-yard hurdle final, half mile run.

Field Events: High pole vault, 16-pound shot, running high jump, running broad jump, 16-pound hammer, 56-pound weight, discus, running hop-step and jump, javelin throw.

The Indoor Events (order to be determined by the committee): 60-yard dash, 300-yard run, 600-yard run, 1000-yard run, two-mile run, one-mile walk, 2-mile steeplechase (water jump omitted), high pole vault, running high jump, relay race (first 440, second 220, third 880, fourth one mile), standing broad jump, standing high jump, 16-pound shot, 70-yard hurdle (5 flights, $3\frac{1}{2}$ feet high).

In addition the A. A. U. holds annually a ten-mile run, a 15-mile run, a seven-mile walk, a pentathlon, a decathlon, an all-round competition, a steeplechase, relay races (440, 880, one mile, two miles, four miles), and one and two-mile team races (teams of five, the first three count), and a marathon championship over the full distance.

The scoring method of these events is given later.

The Intercollegiate A. A. A. Championships

These are held annually on the last Friday and Saturday of May. Each college may enter twelve men in each event only five of whom may compete. The order of the events is:

Friday Afternoon Trials

Track Events: 100-yard run, half-mile run, 120-yard hurdle, 440-yard run, 220-yard hurdle, 220-yard run.

Field Events: 16-pound shot, javelin, pole vault, running high jump, discus, running broad jump, hammer.

Saturday Afternoon Final Events

Track Events: 100-yard run semi-final, 120-yard hurdle semi-final, one-mile run, 440-yard run, 120-yard hurdle final, 100-yard run final, two-mile run, 220-yard hurdle semi-final, 220-yard run semi-final, half-mile run, 220-yard hurdle final, 220-yard run final.

Field Events: 16-pound shot, javelin, pole vault, running high jump, discus, running broad jump, hammer.

The number of contestants must be reduced Friday to nine in the 440-yard run, six in each field event, and to the semi-finals in the dashes and hurdles. The best performance of either day is the record, except the pole vault and high jump (Saturday).

The Annual Indoor Events Are Held the First Saturday in March

Track events are in this order: 70-yard dash trials, 60-yard high hurdle trials, one-mile run (only 3 for each), 70-yard dash semi-final, 60-yard hurdle semi-final, 440-yard varsity relay, freshman relay (880, 440, 220, and one mile respectively), half-mile varsity relay, 70-yard dash final, 60-yard hurdle final, two-mile run (only 3 for each), 440-yard relay final.

Field Events: Running broad jump, pole vault, running high jump, 16-pound shot, 35-pound weight (where possible).

There is a limit to one relay team, three men in the long runs (1 and 2 miles). Relay team points score 5, 4, 3, 2, 1. The number in the dashes determined by the Referee.

The annual cross-country runs are held the Monday before Thanksgiving. Each college may enter twenty men but only seven may compete. The distance is six miles for varsity and three miles for freshmen.

New York City Public School Athletic League

New York was pioneer in organizing an athletic league for public school pupils. Organized in 1902, it is practically but not legally a part of the Board of Education. It is supported and promoted by public-spirited citizens with the cooperation of the Board. There are branches for both boys and girls.

Athletic membership is open to pupils of any public school who are in good amateur standing (A. A. U. rules) and maintain acceptable scholarship (at least "B"). Principals of schools determine eligibility of pupils.

Elementary school athletes may compete for only one church or club or "Center" or "Y" in addition to their school. If they transfer to another school they cannot represent it for 20 weeks unless promoted or transferred by school authority or moved residence. They may enter only one event in a meet. Spiked shoes are not allowed. Entries must be signed by the principal. There are three novice classes—track, field, and aquatic. The athlete cannot compete in the one in which he has won a prize in meets where two or more schools competed. In track, field, swimming, and skating events athletes are divided into weight classes, competing only in their weight class: 85 pound, 100 pound, 115 pound, and unlimited weight. The list of events for both outdoor and indoor meets is the same, except that the standing broad jump is substituted

for the running jump in indoor meets, as follows: 40 yards run for 75-pound class, 50 yards run for 85-pound class, 60 yards for 100 pound, 70 yards for 115 pound, 100 yards for unlimited, 220 relay for 70 pound, 360 relay for 85 pound, 440 relay for 100 pound, 440 relay for 115 pound, 880 pound for unlimited, running broad jump for 85 pound, running high jump for 85 pound, running high and broad jumps for 100 pound, running broad jump for 115 pound, put 8-pound shot for 115 pound, put 8-pound shot and running high jump for unlimited class.

High school athletics are open to all high school pupils and members of the Athletic Association of private schools of New York City. If he comes from outside schools he cannot compete for ten weeks. Scholarship and deportment must be maintained (must have 16 hours credit). No graduate of a four-year secondary school can compete, nor a twenty-one year old student. A graduate of a three-year high school taking a postgraduate course may compete for one year. No high school athlete may represent any other organization. He may compete in any number of field events but only two runs in one meet. He is not allowed to bet or act as agent for betting. A yearly medical examination is required. Evening high and trade schools athletes must have been registered in studies for at least thirty days, attend 80 percent of time and have standing satisfactory to the principal and must not have competed as a registered athlete for one year in a registered athletic club or in A. A. U. meets. There are three novice classes—track, field, and cross-country. If he wins a prize in a meet he still remains a novice in that class in that meet. High school boys under sixteen are in the junior class and those over in senior. In weight class events there are 100, 120, and unlimited classes.

A list of the events used in outdoor high school meets: 100-yard run for juniors, 220-yard run for juniors, 100 and 200-yard runs for seniors, 440-yard run, half-mile run, mile run, 120-yard high hurdles, 220-yard low hurdles, running high and broad jumps, 12-pound shot put, high pole vault, Greek style discus throw, 440-yard relay for 100-pound class, 880-yard relay for 120-pound class, mile relay for unlimited class, junior novice 75 yards, senior 600 yards, junior running high jump, senior 12-pound shot put. In indoor meets the runs are the same as outdoor (except the hurdles). The indoor field events are: Running high jump, 12-pound shot put. There is also a freshmen half-mile relay and a general 100 yards high hurdle race.

General Notes on All School Boy Athletics

In weight class events the weighing is done in athletic costume minus shoes. If they weigh too heavy for the class event for which they entered they cannot compete in any other class.

Schools giving inducements to athletes of other schools to compete for them are expelled.

The age of large or mature looking athletes must be attested by birth certificate and additional careful investigation must be made by the principal.

Amateur status if questioned and protests must be submitted to the secretary of the League in writing. Athletes competing in meets not sanctioned by the League are subject to suspension or expulsion.

Classified Championships

The need for grading athletes and placing them in different classes for competition was first recognized in conducting athletics for boys, where the difference in them was so extreme that they could not compete in the same events at the same time.

The first attempt at classification was made according to age, but it was soon discovered that boys of the same age also differ greatly in size and ability. So the height standard was tried, then the height-weight, then the physiological-age, and other combinations. After experimenting a long time it was found that the weight standard was the simplest and most just of the single element kind, and for many years it has been the one used by schools, playgrounds, and "Y's."

Unfortunately, there is no agreement among these organizations in their classification. The New York schools list the elementary boys into 85 pounds and under, 100 pounds, 115 pounds, and unlimited weight class. The rural "Y" grading is 60 to 80 pounds, 95 pounds, 110 pounds, 125 pounds, and unlimited weight. In playgrounds the classification varies with the different cities in which such events are held.

In the following pages there is given in detail various athletic meets that have used different kinds of classification not only for boys but for men.

RURAL SCHOOL ATHLETICS

In conducting athletics in rural districts Dr. John Brown devised a plan in which the school superintendents, principals and teachers of the county are associated to promote and standardize athletics for the county. This is done by either of two forms of organization: (1) A County School Recreation Association to promote both athletics and games for boys and girls; or (2) a County School Association that will also promote festivals, health campaigns, fairs, exhibits and educational features in which a Recreation Committee shall look after athletics and games.

The Athletic Test Committee seeks to get every boy in every school in the county to take part, who is 60 pounds or over in weight, who is

TRACK AND FIELD ATHLETICS

physically fit according to a physician's certificate, and who maintains a satisfactory standing in his studies.

Each school may conduct its own test separately or several schools may combine, so as to add the competitive interest, but in any case are records are all sent to headquarters where the results are tabulated and sent to all the schools. The events, classification and scoring are as follows:

EIGHTY-POUND CLASS (BOYS WEIGHING BETWEEN 60 AND 80 POUNDS)

	0 Points	Honor Standard	100 Points Scoring
<i>85-lb. Class</i>			
50-yard dash.....	10 sec.	8 sec.	6 sec.
Standing broad jump.....	3 ft. 5 in.	5 ft. 6 in.	7 ft. 7 in.
Running broad jump.....	5 ft. 10 in.	10 ft.	14 ft. 2 in.
Baseball throw.....	70 ft.	120 ft.	170 ft.
<i>95-lb. Class</i>			
75-yard dash.....	13 sec.	11 sec.	9 sec.
Standing broad jump.....	3 ft. 11 in.	6 ft.	8 ft. 1 in.
Running broad jump.....	6 ft. 10 in.	11 ft.	15 ft. 2 in.
Baseball throw.....	100 ft.	150 ft.	200 ft.
<i>110-lb. Class</i>			
100-yard dash.....	16 sec.	14 sec.	12 sec.
Standing broad jump.....	4 ft. 5 in.	6 ft. 6 in.	8 ft. 7 in.
Running broad jump.....	7 ft. 10 in.	12 ft.	16 ft. 2 in.
Running high jump.....	2 ft. 8½ in.	3 ft. 9 in.	4 ft. 9½ in.
Baseball throw.....	130 ft.	180 ft.	230 ft.
<i>125-lb. Class</i>			
100-yard dash.....	15 sec.	13 sec.	11 sec.
Standing broad jump.....	4 ft. 11 in.	7 ft.	9 ft. 1 in.
Running broad jump.....	8 ft. 10 in.	13 ft.	17 ft. 2 in.
Running high jump.....	2 ft. 11½ in.	4 ft.	5 ft. ½ in.
Baseball throw.....	145 ft.	195 ft.	245 ft.
Putting 8-lb. shot.....	15 ft. 6 in.	28 ft.	40 ft. 6 in.
<i>Unlimited Class</i>			
100-yard dash.....	10 sec.	12 sec.	10 sec.
Standing broad jump.....	5 ft. 5 in.	7 ft. 6 in.	9 ft. 7 in.
Running broad jump.....	9 ft. 10 in.	14 ft.	18 ft. 2 in.
Running high jump.....	3 ft. 3½ in.	4 ft. 4 in.	5 ft. 4½ in.
Baseball throw.....	160 ft.	210 ft.	260 ft.
8-lb. shot.....	22 ft. 6 in.	35 ft.	47 ft. 6 in.

Points shall be scored on the following basis:

- All dashes, for every ¼ second better than the minimum..... 5 points
- Standing broad jump, for every inch better than the minimum..... 2 points
- Running broad jump, for every inch better than the minimum..... 1 point
- Running high jump, for every inch better than the minimum..... 4 points
- Baseball throw, for every 1 foot better than the minimum..... 1 point
- Putting 8-pound shot, for every 3 inches better than the minimum.... 1 point

The standing of the athletes and the schools should be tabulated to determine the champion schools and athletes. The following is recommended.

Get the total points made by each athlete, also average. From this determine:

a. The best individual average in each weight class in each school and in the county to get the weight-class champion.

b. The best individual average made in any weight class of each school to get the school all-round champion.

c. The same for the county to get the county all-round champion.

d. Determine the weight class in each school and in the county that has the most points, to get the school and county weight class champion.

e. Get the average of all the weight classes of each school and compare with the others to get the champion school of the county.

Suggestions in Conducting the Above Test

1. Each boy in each school who is eligible must compete in each event of his class, otherwise he lowers the standing of the school.

2. The test is held in the school yard and the road.

3. Get a physician to examine, free of charge, all the boys.

4. Have accurate scales for weighing. Weigh each in street clothes and deduct estimated weight of clothes.

5. Get local teachers or athletes and directors from nearby cities to act as officials.

6. Get inexpensive prizes such as buttons, badges, certificates, pennants, shields, or plaques to the following:

a. School winning the school championship of the county.

b. Weight-class champions of the county.

c. Weight class in each weight winning the weight class championship.

d. The athlete winning the all-round championship of the county.

e. The athletes making the highest scores in the county in each event.

HIGH SCHOOL ALL-ROUND TEAM CONTESTS

To overcome the defects usually found in interscholastic athletic meets Dr. John Brown has adapted the all-round team idea so as to give the small schools an equal standing with the larger ones. The plan is to group the events into four classes. No athlete is allowed to compete in more than one event in each group. Each school is obliged to put a certain percent of its enrollment (usually 2 percent in each event) and the average of this team represents that school's record for that event. If their assignment calls for six athletes and only four compete, the total record made by the

four must be divided by six. Therefore, it is to the advantage of each school to have a full list of athletes.

Scoring Plan

Group A—Sprints

	0 Points	100 Points	
100 yards.....	14 $\frac{3}{8}$ sec.	10 $\frac{3}{8}$ sec.	or 5 points for each $\frac{1}{8}$ second.
220 yards.....	29 sec.	24 sec.	or 4 points for each $\frac{1}{8}$ second.
440 yards.....	65 sec.	55 sec.	or 2 points for each $\frac{1}{8}$ second.

Group B—Runs

Half mile.....	3 m. 5 sec.	2 m. 15 sec.	or 2 points for each 1 second.
1 mile.....	6 m. 50 sec.	5 m. 10 sec.	or 1 point for each 1 second.
2 miles.....	14 m. 20 sec.	11 m.	or 1 point for each 2 seconds.

Group C—Jumps

Running high.....	3 ft. 3 $\frac{1}{2}$ in.	5 ft. 4 $\frac{1}{2}$ in.	or 4 points for each 1 inch.
Running broad.....	9 ft. 10 in.	18 ft. 2 in.	or 1 point for each 1 inch.
Running hop, step and jump.....	21 ft. 8 in.	38 ft. 4 in.	or 1 point for each 2 inches.

Group D—Throws

Baseball.....	175 ft.	275 ft.	or 1 point for each 1 foot.
8-pound shot.....	20 ft.	45 ft.	or 4 points for each 1 foot.
Discus.....	50 ft.	100 ft.	or 2 points for each 1 foot.

Alternates

Pole vault (Group C)...	4 ft. 10 in.	9 ft.	or 2 points for each 1 inch.
120-yard hurdles (Group C).....	26 sec.	18 sec.	or 2 $\frac{1}{2}$ points for each $\frac{1}{8}$ second
12-lb. shot (Group D)...	15 ft.	40 ft.	or 4 points for each 1 foot.
12-lb. hammer (Group D)...	50 ft.	100 ft.	or 2 points for each 1 foot.

SIMPLIFIED ATHLETIC CONTESTS FOR BOYS

This is an all-round point scoring contest devised by Geo. O. Draper, for rural schools and has distinctive features, one of the best being that smaller boys can compete with larger ones on a comparative scoring basis.

The boys are classified into five groups as follows:

Class 1—Boys under fourteen years weighing under 81 pounds.

Class 2—Boys under fourteen years weighing 81 pounds and over, and boys of fourteen and fifteen years who are under 96 pounds.

Class 3—Boys fourteen and fifteen years old weighing 96 pounds and over, and boys of sixteen and seventeen weighing under 111 pounds.

Class 4—Boys of sixteen and seventeen weighing 111 pounds and over.

Class 5—Boys eighteen years old of any weight.

Rules and instructions:

The weight of the contestants is taken with coat, vest, and hat off, within one week of the contest.

Do not use fractions in scoring. If the record falls between the numbers of the scoring table give him the next highest point.

When a boy exceeds a record give one point extra as follows: For 3 inches in the standing jump; for 9 inches in the running jump; for 2 inches in the high jump; for 10 feet in the 10-second run; for 10 feet in the baseball throw; for 2 extra pull-ups.

The standard rules are used except in the 10-second dash. In this mark off zones every 10 feet from the 100-yard mark for some distance. Each runner is timed for 10 seconds with an ordinary watch and his points are determined by the zone he is in at the end of the 10 seconds. The timer is also the starter who starts the runner by the hand signal.

The score of the class or schools competing is determined by adding the points made by each contestant and dividing by the number who are eligible to compete. This is to encourage everyone to compete who is able.

The following is the scoring system used:

STANDING BROAD JUMP

Points	Class I		Class II		Class III		Class IV		Class V	
	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches
1.....	4	6	5	3	5	9	6	6	7	
2.....	4	9	5	6	6		6	9	7	3
3.....	5		5	9	6	3	7		7	6
4.....	5	3	6		6	6	7	3	7	9
5.....	5	6	6	3	6	9	7	6	8	
6.....	5	9	6	6	7		7	9	8	3
7.....	6		6	9	7	3	8		8	6
8.....	6	3	7		7	6	8	3	8	9
9.....	6	6	7	3	7	9	8	6	9	
10.....	6	9	7	6	8		8	9	9	3

RUNNING BROAD JUMP

Points	Class I		Class II		Class III		Class IV		Class V	
	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches
1.....	6	9	8	3	9	9	11	3	12	
2.....	7	6	9		10	6	12		12	9
3.....	8	3	9	9	11	3	12	9	13	6
4.....	9		10	6	12		13	6	14	3
5.....	9	9	11	3	12	9	14	3	15	
6.....	10	6	12		13	6	15		15	9
7.....	11	3	12	9	14	3	15	9	16	6
8.....	12		13	6	15		16	6	17	3
9.....	12	9	14	3	15	9	17	3	18	
10.....	13	6	15		16	6	18		18	9

RUNNING HIGH JUMP

Points	Class I		Class II		Class III		Class IV		Class V	
	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches
1.....	2		2	2	2	4	2	8	3	
2.....	2	2	2	4	2	6	2	10	3	2
3.....	2	4	2	6	2	8	3		3	4
4.....	2	6	2	8	2	10	3	2	3	6
5.....	2	8	2	10	3		3	4	3	8
6.....	2	10	3		3	2	3	6	3	10
7.....	3		3	2	3	4	3	8	4	
8.....	3	2	3	4	3	6	3	10	4	2
9.....	3	4	3	6	3	8	4		4	4
10.....	3	6	3	8	3	10	4	2	4	6

TRACK AND FIELD ATHLETICS

TEN-SECOND RUN

Points	Class I Feet	Class II Feet	Class III Feet	Class IV Feet	Class V Feet
1.....	120	140	160	180	200
2.....	130	150	170	190	210
3.....	140	160	180	200	220
4.....	150	170	190	210	230
5.....	160	180	200	220	240
6.....	170	190	210	230	250
7.....	180	200	220	240	260
8.....	190	210	230	250	270
9.....	200	220	240	260	280
10.....	210	230	250	270	290

BASEBALL THROW

Points	Class I Feet	Class II Feet	Class III Feet	Class IV Feet	Class V Feet
1.....	80	110	140	180	200
2.....	90	120	150	190	210
3.....	100	130	160	200	220
4.....	110	140	170	210	230
5.....	120	150	180	220	240
6.....	130	160	190	230	250
7.....	140	170	200	240	260
8.....	150	180	210	250	270
9.....	160	190	220	260	280
10.....	170	200	230	270	290

PULL-UP

Chinning the Bar

Points	Class I Number	Class II Number	Class III Number	Class IV Number	Class V Number
1.....	1	2	3	4	5
2.....	3	4	5	6	7
3.....	5	6	7	8	9
4.....	7	8	9	10	11
5.....	9	10	11	12	13
6.....	11	12	13	14	15
7.....	13	14	15	16	17
8.....	15	16	17	18	19
9.....	17	18	19	20	21
10.....	19	20	21	22	23

REILLY'S INDIVIDUAL CLASSIFICATION FOR SCHOOL BOYS AND GIRLS

Weight, or any other short method of classifying boys and girls, is defective. To overcome defects as far as possible F. J. Reilly devised a scheme that has been used in one school (Public School 33—Bronx) for six years for boys and girls of the fifth to eighth grades of school and has been adopted in several cities. The plan is here given:

Classes

The athletic class in which a pupil competes is determined by the sum of the exponents of his age, height, weight, and school grade.

There are five classes. If the sum of a pupil's exponents (see below) is 21 or less he is in Class A, from 22 to 25 Class B, from 26 to 29 Class C, 30 to 33 Class D, and 34 and over Class E.

The pupils are further placed in two divisions: Fifth and sixth school grade pupils are in the Junior Division and those in the seventh and eighth grades are in the Senior Division.

The following tables give the exponent value of each item (school grade, age, height, and weight) :

Junior Division

School Grade		5 A	5 B	6 A	6 B	
Age up to	10	10-1 to 11	11-1 to 11-6	11-7 to 12	12-1 to 13	13-1 or over
Height up to	4-2	4-3 to 4-5	4-6 to 4-8	4-9 to 4-11	5 to 5-2	5-3 or over
Weight up to	64	65 to 74	75 to 84	85 to 94	95 to 104	105 or over
Exponent value.	4	5	6	7	8	9

Senior Division

School Grade		7 A	7 B	8 A	8 B	
Age up to	12	12-1 to 13	13-1 to 13-6	13-7 to 14	14-1 to 15	15 or over
Height up to	4-4	4-5 to 4-8	4-9 to 5	5-1 to 5-3	5-4 to 5-6	5-7 or over
Weight up to	74	75 to 89	90 to 104	105 to 119	120 to 129	130 or over
Exponent value.	4	5	6	7	8	9

Example: A boy or girl in school grade 5B, exponent value is 6
 Age, 10 years 6 months, " " " 5
 Height, 4 feet 10 in., " " " 7
 Weight, 84 pounds, " " " 6

Sum of exponents24

Note that 24 falls in athletic class B.

One exception is made for a fat boy or girl. When the exponent for weight is two points higher than the exponent for height the classification is automatically reduced two steps (a "D" boy becomes "B").

Although this classification takes a little longer it is so much more satisfactory than the others that it should be used by all those who desire to be reasonably just. It may be used in conducting meets that list any events, but it was especially designed to be used for testing physical efficiency of school boys and girls of the fifth to the eighth grades, using the following events:

For boys—Potato race, standing broad jump, chinning, combined dip, 50-yard dash, high jump, hop-step-jump, grip test, far basketball throw, goal throw, and trunk raising.

For girls—Potato race, stand broad jump, knee raising, far basketball throw, trunk raising, 50-yard dash, grip test, goal throw, spring feet backward.

Scoring tables giving the technic and points for each event may be obtained of the Athletic Association, Public School 33, the Bronx, New York City. They will be of especial value to directors in charge of these grades anywhere.

NEW YORK STATE PUBLIC HIGH SCHOOL ATHLETIC ASSOCIATION

The recent increase of supervision of state public school physical training has resulted in state-wide athletic competition among high schools.

To foster and control such competition in New York State the New York State Public High School Athletic Association has recently been organized.

The State Supervisor of Physical Education is ex-officio president, and he appoints a Central Committee that is the governing body.

Schools joining the Association pay annual dues ranging from \$2 to \$10 according to the size of the school.

The principals of the schools that are members constitute an advisory Committee and serve on committees.

The sectional representative of the Central Committee must promote track and field athletics, conduct sectional meets (appointing a committee of five to assist), and selects and controls the athletes to the state meet. The winners of the sectional meets only compete at the state meet. They are restricted to one event in addition to the relay race.

Coaches have no official connection with the meets and do not officially accompany the team to meets.

The profits of the meets go toward the combined expenses and are pooled.

Awards to individual winners of events are certificates that entitle the holders to wear the official emblem. Perpetual trophies to be competed for annually are provided.

The state is divided into fourteen districts.

The list of events includes the 100 yards dash, the 220 and 440 yards, the half-mile run, 220 yards hurdle (low), 12-pound shot, one-mile run, pole vault, running high jump, running broad jump, and medley relay (100, 220, 440, 880).

The scoring is on the first four places having point values of 5, 3, 2, 1.

Classified Athletics for Men

For many years there has existed in the A. A. U. a rough classification of men in championship meets with reference to their ability, namely: Novice, Junior and Senior.

Novice. A novice is one who has won a place prize in a dual or open meet in the class of sport in which he wishes to compete. The following are the different classes: Running, team runs, jumping, pole vault, weight events and walking. The moment an athlete wins a prize he loses his novice standing in that class; also if the committee thinks that he intentionally avoided winning a prize. (In the Public School Athletic League there are only three classes: Track Events, Field Events and Aquatics. But when the grammar school boy enters the high school he becomes a novice in high-school events, even though he may have lost his novice standing in the elementary schools.)

Junior: A junior is one who has not won first place in any event in any national or international meet.

Senior: A senior is one who has won first place in any event in a national or international meet. Novices and juniors may enter senior events but not the reverse.

It will be noticed that in the above the standing of the athletes is determined by only one event, but to "make" the college fraternity the athlete must show all-round ability—a far better plan of classification.

The Chicago Central Y. M. C. A. has used the all-round method of classification for several years and has adopted the following requirements:

The athletes are placed according to ability in three classes:

Class A. Those who equaled or bettered the following indoor records: 20-yard dash, 3 seconds; 100-yard dash, 12 $\frac{2}{5}$ seconds; 220-yard dash, 26 $\frac{3}{5}$ seconds; 440-yard dash, 60 seconds; 880-yard dash 2 minutes 15 seconds; one-mile run, 5 minutes 5 seconds; running high jump 5 feet; running broad jump 17 seconds; standing high jump 4 feet 6 inches; one standing broad jump 9 feet 2 inches; two standing broad jumps 18 feet; three standing broad jumps 27 feet; pole vault 9 feet; 12-pound shot 36 feet.

Class B. Anyone who has competed and received a place (first, second or third) in any meet but who has not equaled class A records and has not made below the following: 20-yard dash, 3 $\frac{1}{5}$ seconds; 100-yard dash, 13 seconds; 220-yard dash, 29 seconds; 440-yard dash 65 seconds; 880-yard dash, 2 minutes 25 seconds; one-mile run 5 minutes, 25 seconds; running high jump 4 feet 8 inches; running broad jump 16 feet; standing high jump 4 feet 3 inches; one standing broad jump 8 feet 8 inches; two standing broad jumps 17 feet; three standing broad jumps 25 feet; pole vault 8 feet; 12-pound shot put 33 feet.

Class C. Includes new men and those having competed who were not placed or who did not equal the figures given under class B.

Individual All-Round Championships

In this kind of a contest each athlete enters all of the events of a meet and his total score determines his standing.

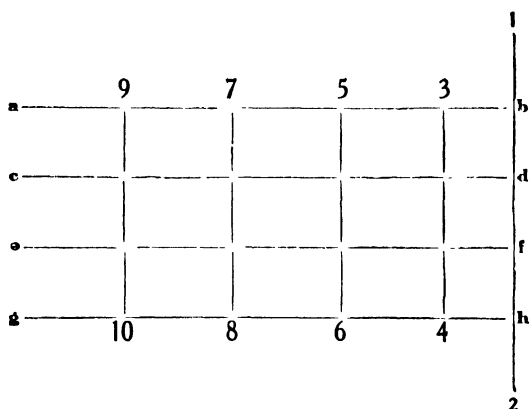
The object of all-round contests is to discourage specialization. Hygienically it is better to have fair ability in many events than to be expert in only one. It is also a better index of a person's athletic ability. This was the plan of the ancient Greek "Pentathlon," which for centuries was used as the climax of athletics in determining national championship. The five events they used were a run, jumping, throwing the discus, throwing the javelin, and wrestling.

The pentathlon idea was revived and modified to suit modern athletic conditions and was adopted by the Y. M. C. A.

The modern pentathlon, as originated by Dr. L. H. Gulick, consists of the 100-yard dash, 12-pound hammer (without turn), running high jump, pole vault, and one-mile run.

The officials and their respective duties are the same as those for any similar athletic contest.

In the 100-yard dash the Timers shall give to the Judge the time made by the leading man of each heat. As the leading man of each heat breasts the tape the Judge shall fire a pistol. In cases where it is of great importance that there be no misfire, it is recommended that the Judge use two pistols, one with each hand, and fire them simultaneously. There shall be an assistant for each man in the heat. It shall be his duty to mark, as accurately as possible, the exact location of the chest of his man when the pistol is fired. He shall hold this mark till it has been taken by the Judge. The track shall be marked as follows:



The line 1—2 is the finish.

The lines a—b, c—d, e—f, g—h, form the lanes in which the contestants are to run.

The line 3—4 is drawn three feet from the line 1—2; the lines 5—6, 7—8, 9—10 are drawn at regular intervals of six feet.

Each contestant shall have as many fifths of a second added to the score of the leading man as there are transverse lines between them when the finish pistol is fired. When a man is on a line it is to count as one-half

a fifth, equivalent to five points. If a man were on the line 5—6 when the pistol was fired, and the time given was eleven seconds, there is one line between the two men; this adds one-fifth second; being on the line adds one-tenth more, making eleven and three-tenths seconds. If he had been just behind this line the score would have been eleven and two-fifths seconds, or if just in front, eleven and one-fifth seconds.

Not less than three watches shall be held on the leading man in each heat.

Note.—For accurate timing each runner should be timed separately with three watches, the competitors running in small heats or individually.

In the running high jump the stick (cross-bar) shall be started at 3 feet 6 inches and raised two inches at a time.

In the pole vault the stick shall be started at 5 feet 10 inches and raised four inches at a time.

In throwing the hammer no turn is required.

The scorer shall reduce the records of the performance in the different events by each individual to the standard scoring table, and shall record the number of points made in each event by each man. A man passing the upper limit in any event shall be credited proportionately. No mark less than zero shall be given, even in case the record falls below the measure indicated for zero.

Percentage scoring as used in the modern pentathlon. (See Y. M. C. A. scoring tables.)

100-yard dash.	0 pts. 11 $\frac{2}{5}$ sec.	100 pts. 10 $\frac{2}{5}$ sec.	or 20 pts. for each $\frac{1}{5}$ sec.
Running high jump. . .	0 pts. 3 ft. 6 in.	100 pts. 5 ft. 7 in.	or 1 pt. for each $\frac{1}{4}$ in.
Pole vault.	0 pts. 5 ft. 10 in.	100 pts. 10 ft.	or 1 pt. for each $\frac{1}{2}$ in.
12-lb. hammer.	0 pts. 50 ft.	100 pts. 100 ft.	or 1 pt. for each 6 in.
Mile run.	0 pts. 6 m. 40 sec.	100 pts. 5 m.	or 1 pt. for each second.

A. A. U. ALL-ROUND CONTEST

To determine the all-round A. A. U. champion of America that organization holds a yearly all-round competition using the following events: 100-yard run, putting 16-pound shot, running high jump, 880-yard walk, throwing 16-pound hammer, pole vault for height, 120-yard hurdle (10 flights, 3 feet 6 inches high), throwing 56-pound weight for distance, running broad jump, one-mile run. The events shall be contested in the above mentioned order. Each event shall be started five minutes after the event preceding it has been contested.

In each event the world's best amateur record in the Amateur Athletic Union record book of 1893 shall be taken as a maximum, for which 1,000 points will be allowed. Then a standard or limit is established, and performances equal to or worse than these standards score nothing. For

performances between the maximum and the limit, points are allowed in accordance with graded table. For a performance exceeding the record, correspondingly higher points will be awarded.

Three trials only are allowed in both jumping and throwing.

In the 100-yard run and 120-yard high hurdle race, the time of the winner only is taken and the other contestants must be scored by their distance back of the winner. The final 10 yards of the course is marked off with whitewash lines one foot apart. The Judges shall station themselves in such positions as will enable them to note accurately the distance from the finish line of the second, third and fourth men at the moment the first man touches the tape. Not more than four men shall start in any heat. If there are more than four men in the competition they shall be divided into heats of not more than three starters. The fastest three men, as nearly as the officials can judge, shall be placed on one heat; the next three in speed in the next heat, and so on down to the slowest three for the last heat. When the judges announce the distances between the contestants, the scorers shall allow points as follows:

One hundred yards—To the first man, the points allowed in the table for his time; to the second, third and fourth men, the points in the table for his time; to the second, third and fourth men, the points allowed for the first man's time, less seven points for each foot that each man is behind the winner.

One hundred and twenty yards high hurdle—To the first man, the points allowed in the table for his time; to the second, third and fourth men, the points allowed for the first man's time less five points for each foot that each man is behind the winner.

In the 880-yard walk and one-mile run the time for each competitor shall be taken by three watches.

The winner shall be the one who has obtained the highest number of points in the ten divisions.

How to score the All-Round (see A. A. U. rule book).

It is left to the discretion of the A. A. U. Championship Committee whether the all-around or Olympic decathlon, or both, shall be held in any one year.

OLYMPIC PENTATHLON

The following are the rules of the pentathlon used in the Olympic quadrennial meets to determine the world best all-round athlete in these five events also adopted for annual competition.

The competition comprises the following events: Running broad jump, throwing the javelin, 200-meter flat race, throwing the discus, and 1,500-meter flat race. The events shall be contested in the above mentioned order.

Three trials only are allowed in both jumping and throwing. Three fouls in any event disqualifies the contestant.

In the 200-meter flat race, groups of three men are formed by lot.

If the number of runners is such that after the groups have been arranged one man is over to run alone, one man shall be drawn by lot from among the remaining competitors to run against him.

In each event the winner shall receive 1 point, the second man 2 points, etc.

Points are counted according to the result obtained. In the event of a tie, the competitors need not compete again. If thus two or more obtain the same result, those so tying receive the same points, and the next man receives a point corresponding to the position in which he finishes relative to all the other competitors.

All compete in the first three events. The total points of the competitors are counted, and the twelve best (i.e., those with the lowest number of points) shall qualify to compete in the discus throwing. If the counting of the points results in a tie for the twelfth place, all such may start in the discus throwing.

The points of the competitors entitled to compete in the discus throwing shall then be counted again with reference to their relative order in each of the first three events, their points being counted as if they alone had competed without reference to the placing of other competitors. The discus throwing and 1,500 flat race shall then be started from the points thus awarded.

After the discus throwing, the six best compete in the 1,500-meter flat race, to be run in one heat.

If more than one tie for the sixth place after the discus throwing, all such may compete in the 1,500-meter flat race.

In the flat races, the time for each competitor shall be taken with three watches.

The winner shall be the one who, on the completion of the 1,500-meter flat race, has obtained the lowest total points in the five competitions.

If at the end of the competition one or more of the competitors obtain the same number of points, their respective positions shall be determined by the valuation of their result according to the decathlon table.

THE OLYMPIC DECATHLON

The following are the rules of the Decathlon used in the Olympic quadrennial meets to determine the world best all-round athlete in these ten events.

The competition comprises the following events: 100 meters flat, running broad jump, putting the weight, running high jump, and 400 meters flat, on the first day; hurdle race (110 meters), throwing the discus, pole vault, throwing the javelin, and 1,500 meters flat, on the following day. The events shall be contested in the above-mentioned order.

Three trials only are allowed in both jumping and throwing.

Both in the 100-meter and 400-meter flat races, as well as in the

hurdle race, three or four competitors start in each group. On the other hand, in the 1,500-meter race, five or six shall start. However, the Referee shall have the right, in case of necessity, to make alterations.

The composition of the groups is decided by lot.

The time for each competitor shall be taken with three watches.

The winner shall be the one who has obtained the highest number of points in the ten divisions.

For a result similar to the best result obtained at the 1912 or previous Olympic Games, 1,000 points will be awarded. Other results are valued in accordance with a special table (see A. A. U. Handbook). If a result exceeds the best Olympic result, correspondingly higher points will be awarded.

TEAM CHAMPIONSHIPS

As previously explained, it is customary to determine the winning team at the same time and from the results of individual championship meets, merely by adding the total points made by the athletes of each team.

There are two kinds of team championships, one that does not require all athletes of each team to enter every event, and one that does require such all-round competition. The first kind is shown in the Hexathlon, given below, and the second kind by the all-round Pentathlon and Decathlon.

Y. M. C. A. Indoor Hexathlon (1920)

The Associations are classified according to size of membership into three classes. Class A, 1000 or over. Class B, from 500 to 1000. Class C, under 500. The contest was scheduled, two events on each of three dates. Each Association conducted the events in its own gymnasium and sent the results to headquarters—the ten best records in each event of Class A, eight in B, and six in C.

The events and scoring were as follows:

60-yard potato race. 18 seconds, 0 points; for each $\frac{1}{5}$ second less, 5 points; 14 seconds, 100 points.

160-yard potato race. 1 minute 3 seconds, 0 points; each $\frac{1}{5}$ second less, 1 point; 43 seconds, 100 points.

Running high jump. 3 feet 6 inches, 0 points; for each inch more, 4 points; 5 feet 7 inches, 100 points.

Standing broad jump. 6 feet, 0 points; for each inch more, 2 points; 10 feet 2 inches, 100 points.

12-pound shot-put. 18 feet, 0 points; for each foot more, 4 points; 43 feet, 100 points.

Fence vault. 3 feet 11 inches, 0 points; for each inch more, 3 points; 6 feet 8 inches, 100 points.

The distinctive method of determining the winning teams in these contests are that the best 10 records made in *each* event decides that event in Class A Association, 8 for Class B, and 6 for Class C.

Contests may be held on two separate nights:

(1st night 60-yard potato race, high jump, and shot-put.
2nd night 160-yard potato race, broad jump, fence vault.)

Boys' Hexathlon Contests

These are also held annually by the Y. M. C. A. and are classified with reference to numbers in the Boys' Department. Class A, 500 and over, Class B, 250 and over, Class C, under 250.

In Class A the best 8 records count in each event
 " " B " " 5 " " " " "
 " " C " " 3 " " " " "

Competitors are also classified. The events and class follow:

For the 80, 95, and 110 lb. Class: Short potato race, running high jump, target throw, long potato race, standing broad jump, and snap for distance.

For the 125-pound and Unlimited Classes: Short potato race, running high jump, 8-pound shot, long potato race, standing broad jump, and fence vault.

The length of potato races varies with the weight:

80-pound Class, 1 potato for short race, 3 for long.
 95-pound Class, 1 potato for short race, 4 for long.
 110-pound Class, 2 potatoes for short race, 5 for long.
 125-pound Class, 2 potatoes for short race, 6 for long.
 Unlimited Class, 3 potatoes for short race, 6 for long.

The plan of scoring for the boys' Hexathlon events follows::

80-lb. Class (60 to 80-lb. Boys)

1-potato race.....	8 $\frac{3}{4}$ sec.	is 0; 4 $\frac{3}{4}$ sec.	is 100 pts., or 5 pts. for each $\frac{1}{8}$ sec.
3-potato race.....	20 $\frac{3}{4}$ sec.	is 0; 16 $\frac{3}{4}$ sec.	is 100 pts., or 5 pts. for each $\frac{1}{8}$ sec.
Stand. broad jump.	5 ft.	is 0; 7 ft. 1 in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.
Running high jump.	2 ft. $\frac{1}{2}$ in.	is 0; 4 ft. 1 $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.
Snap under bar....	1 ft. 5 in.	is 0; 5 ft. 7 in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.

95-lb. Class (80 to 95-lb. Boys)

1-potato race.....	8 sec.	is 0; 4 sec.	is 100 pts., or 5 pts. for each $\frac{1}{8}$ sec.
4-potato race.....	26 sec.	is 0; 22 sec.	is 100 pts., or 5 pts. for each $\frac{1}{8}$ sec.
Broad jump.....	5 ft. 6 $\frac{1}{2}$ in.	is 0; 7 ft. $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.
Running high jump.	2 ft. 4 $\frac{1}{2}$ in.	is 0; 4 ft. 5 $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.
Snap under bar....	2 ft. 2 $\frac{1}{2}$ in.	is 0; 6 ft. 4 $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.

110-lb. Class (95 to 110-lb. Boys)

2-potato race.....	13 $\frac{3}{4}$ sec.	is 0; 9 $\frac{3}{4}$ sec.	is 100 pts., or 5 pts. for each $\frac{1}{8}$ sec.
5-potato race.....	37 sec.	is 0; 27 sec.	is 100 pts., or 2 pts. for each $\frac{1}{8}$ sec.
Broad jump.....	5 ft. 11 in.	is 0; 8 ft.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.
Running high jump.	2 ft. 6 $\frac{1}{2}$ in.	is 0; 4 ft. 7 $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.
Snap under bar....	2 ft. 5 in.	is 0; 6 ft. 7 in.	is 100 pts., or 1 pt. for each $\frac{1}{4}$ in.

125-lb. Class (110 to 125-lb. Boys)

2-potato race.....	13 $\frac{1}{2}$ sec.	is 0; 9 $\frac{1}{2}$ sec.	is 100 pts., or 5 pts. for each $\frac{1}{2}$ sec.
6-potato race.....	43 sec.	is 0; 33 sec.	is 100 pts., or 2 pts. for each $\frac{1}{2}$ sec.
Broad jump.....	6 ft. 6 in.	is 0; 8 ft. 7 in.	is 100 pts., or 1 pt. for each $\frac{1}{2}$ in.
Running high jump.	2 ft. 8 $\frac{1}{2}$ in.	is 0; 4 ft. 9 $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{2}$ in.
8-lb. shot put.....	12 ft.	is 0; 37 ft.	is 100 pts., or 1 pt. for each 3 in.
Fence vault.....	3 ft. 6 in.	is 0; 5 ft. 7 in.	is 100 pts., or 1 pt. for each $\frac{1}{2}$ in.

Unlimited Class (over 125-lb. Boys)

3-potato race.....	19 sec.	is 0; 15 sec.	is 100 pts., or 5 pts. for each $\frac{1}{2}$ sec.
6-potato race.....	42 $\frac{1}{2}$ sec.	is 0; 32 $\frac{1}{2}$ sec.	is 100 pts., or 2 pts. for each $\frac{1}{2}$ sec.
Broad jump.....	6 ft. 10 $\frac{1}{2}$ in.	is 0; 8 ft. 11 $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{2}$ in.
Running high jump.	3 ft. $\frac{1}{2}$ in.	is 0; 5 ft. 1 $\frac{1}{2}$ in.	is 100 pts., or 1 pt. for each $\frac{1}{2}$ in.
8-lb. shot put.....	17 ft.	is 0; 42 ft.	is 100 pts., or 1 pt. for each 3 in.
Fence vault.....	3 ft. 10 in.	is 0; 5 ft. 11 in.	is 100 pts., or 1 pt. for each $\frac{1}{2}$ in.

Hexathlon scoring tables may be had at Y. M. C. A., 347 Madison Ave., N. Y.

Mass Athletics or Large Team Contests

From the earliest dawn of the ancient Greek athletic history up to the beginning of the twentieth century the ideal of athletic competition was to produce and display individual champions. In harmony with that age of individualism of kings, nobles, aristocrats and potentates a few received all the attention and the many were neglected. The modern revival of athletics, from 1850, has been a repetition of this custom and quite naturally, it has produced the same variety of evils as in other days—professionalism under the guise of amateurism.

The amateur governing bodies sought to suppress professionalism by the strictest rules, but at the same time, without realizing it, encouraged the very thing that makes professionals—individual specialism. Clubs and colleges vied with each other to get the services of the best athletes. Easy jobs were given them; training tables, expert coaches, attractive prizes, excessive expense money and undue publicity were offered. Naturally, athletes went where they were offered the best bargain, and professionalism in thin disguise flourished. When the well-meaning, self-appointed custodians of amateurism saw that the rules could be so easily violated they set themselves about making stricter ones. Penalties were imposed for fraud, use of an assumed name, unsportsmanlike conduct, coaching for money, capitalizing one's athletic fame to get an easy job or promote some athletic goods, and so on. But strict rules never have and never will do away with the evil as long as the cause remains. In the future even more than in the past because of the tremendous growth of athletics there will be greater inducements to become "world champions" and get expenses paid to big meets to be held anywhere on the globe.

Directors of physical education have for a quarter century realized the trend of athletics, that unless a different emphasis were found the evils of decadent Greek and Roman athletics would be inevitable.

They decided that it was necessary to get the spectators into the

game, to give to the weakling as much attention as to the expert. Colleges introduced compulsory physical training, the municipal playground was started, and required physical training has become a reality in the public schools of several states, and the number is steadily increasing.

It was easy enough to handle the large numbers in the big city schools by means of gymnastics but it was found impossible to conduct track and field athletics in the old way, for lack of time. Thus sometime in the first decade of the present century the "follow-relay-dash" was used in New York City Schools interclass meets. In 1912 the vacation schools of Pittsburgh held interschool meets (100 from each school and all in every event done in relay style.) Here, in addition to a regular track relay race, they used the "follow-relay-broad jump" that did away with measuring each jump.

With the experience of these meets in mind it occurred to the recreation directors of the Y. M. C. A. summer schools of 1913 to hold an interclass all-round meet of the same type but using more events.

To overcome the handicap of space the "shuttle type" of competing was devised for the relay dash, the "follow-jump" was used, a circular track relay, and a one trial at each height high jump was held.

These meets were popular, because no individual records were kept, no one was embarrassed and team spirit prevailed. They solved the problem of handling large numbers in a brief time. This was rather providential, for when the Great War broke out the Y. M. C. A. had a method that was at once used in the recreational life of the fighters, in every training camp and wherever soldiers were.

This type of competition is called "mass athletics" because large numbers of men can compete at the same time. It is the one big contribution that the war made to the popular athletics. Already this plan of competition is being used in schools, colleges, and in community recreation. It is expected to have a salutary effect in overcoming the evils of commercialism, professionalism and "bleacheritis" in athletics.

How to Conduct Mass Athletics

Use only such events as can be participated in by large numbers in a short time, that require little skill, in which all are kept busy all the time, and that require no measurement and no change of clothing.

Each club, school, or college that competes should be represented by a large number of contestants, all teams, of course, must have the same number of contestants.

Running Events

Here is the type of contest in which to use that almost limitless number of relay and novelty races given elsewhere in this book and with which the director should become very familiar.

Long, or Broad, Field Events

Under this head come those events that require horizontal measurement on the ground, such as the broad jump. Only two types of method are appropriate for these events: *Follow Type*: In this type each succeeding athlete starts where the preceding one finished, all teams working side by side at the same time. This requires a large space or wide circular track or course. *Shuttle Type*: In this, one team works in one direction and another in the opposite direction. The teams must compete in pairs; then the winning teams compete until the final winners are determined. The athletes of the two teams alternate in the event. If there are many teams this kind of an event takes more time than the following method but it requires very little space. A list of broad events follows:

Standing broad jumps (one or more), standing hops (one or more), standing backward jumps (one or more), standing and running hop, step and jump, running broad jump, shot put, discus, javelin and baseball throws, medicine ball throw (there are several ways to throw: one arm, both arms backward over the head or between legs or from a lying position).

In the running broad jump use a jump board (beat board) for each team which is placed where the preceding jumper finishes so as to avoid overstepping the mark in a take-off. The putting and throwing events should be done from a standing start and the athletes allowed to overstep the mark afterward. This avoids the possibility of fouling, a very necessary thing in this kind of a meet where each athlete gets only one trial.

Height Events

There is only one way possible to conduct height events, just as they are always done, but in mass athletics the teams are hurried through the event by having jumping standards for each team and giving each jumper only one trial at each height until he misses. In some meets if a jumper misses one height he may try the next heights in his turn until he has failed three times.

Height events always take longer than others and thus are not so adapted to mass athletics, but this objection may be lessened by using several sets of apparatus at the same time. The height events comprise:

Standing and running high jump; pole, rope, ring and fence vaults; high kicking (various styles).

A Standard Mass Pentathlon

The following athletic events are the most attractive for mass athletic contests and are suitable for a standard mass pentathlon:

Fifty-yard run, 50-yard novelty race, standing broad jump, running high jump, weight throw (shot or medicine ball).

The races are best done in the "follow style" and the jump and weight events in the "shuttle style."

The Zone Type of Contest

The zone type is still another method that has been used in athletics among the soldiers. It has the advantage of requiring little space but is not so accurate in results as the other types.

The plan requires a set of three arbitrary marks on the ground at different distances from the start. If an athlete finishes in the nearest he gets only one point, in the second zone two points, and in the third zone three points. In some places five zones are used. The following events have been used:

	Zone 1—1 Point.	Zone 2—2 Points.	Zone 3—3 Points
50-yard dash.....	Scratch	2 yds. from finish	5 yds. from finish
100-yard dash.....	Scratch	3 yds. from finish	8 yds. from finish
400-yard dash.....	Scratch	10 yds. from finish	30 yds. from finish
1 mile run.....	Scratch	25 yds. from finish	50 yds. from finish
Standing broad jump.....	8 ft.	7 ft.	6 ft.
Running broad jump.....	15 ft. 10 in.	14 ft. 6 in.	13 ft.
12-lb. shot.....	35 ft.	30 ft.	25 ft.
3 broad jumps.....	25 ft.	22 ft.	18 ft.
Standing high jump.....	2 ft. 6 in.	3 ft. 3 in.	4 ft.
Running high jump.....	3 ft. 6 in.	4 ft. 3 in.	4 ft. 6 in.

In the dashes a Judge is stationed at each zone. When the winner of a heat crosses the finish line the Judges observe where the other runners are and mark them accordingly.

In the distance events the zone in which the athlete finishes is easily seen.

In the height events if enough jump standards are not available marks are made with chalk on the clothing of two men who hold the crossbar or rope at the mark. The team that has the highest number to clear the third height is the winner.

MEETS CLASSIFIED ACCORDING TO LOCATION

In all kinds of athletics, whether tests or contests, it is necessary to consider those who are eligible with reference to their affiliations and location.

If a meet is limited to the athletes of a single club it is called a "closed meet." Such meets should be held often to develop athletes in an organization. For such meets no sanctions are required by governing bodies and the athletes need not be registered, but no records broken in such meets are allowed in records published by governing bodies.

"Open meets" are those in which the athletes of two or more organizations compete.

"Dual meets" are limited to the athletes of two clubs. These are

popular and easily conducted. They do not require much space and therefore can be readily attempted by small as well as large clubs.

"Invitation meets" are those that are limited to certain definite clubs, schools, or other organizations selected by the promoters.

Again, meets may be limited to the athletes of a city, county, state, section, or nation. City athletics are seen in such organizations as a local federation of all athletic clubs in a city, or of a certain group of organizations, such as the Public School Athletic League, the Sunday School Athletic League, Playground League, etc.

County athletics are now promoted through many county Y. M. C. A.'s. The Cook County, Ill. A. A. F. is a federation of a large number of the athletic clubs, churches and playgrounds of that county and is a model of efficiency in athletic promotion.

State meets are sometimes held but more often section meets, comprising several states, hold championships.

National meets are seen in the annual A. A. U. Championships and in the Y. M. C. A. hexathlon.

International meets are those in which athletes of all countries are eligible, such as the Olympic Meets, held every four years in different countries.

HANDICAP MEETS

Handicap meets are those in which it is sought to place all contestants on an equal basis by allowing the poorer athletes enough advantage so as to equal the record of the best in that event.

In the track events this is done by placing the slower men far enough ahead of the better so that they should finish at the same time. (The best man is called "scratch" man.) For example: In the 100-yard dash, A's previous time was 10 seconds, thus running 10 yards every second, or 2 yards for each $\frac{1}{5}$ second. Then if B's previous record in the same event was $10\frac{3}{5}$ seconds the handicapper will allow B 6 yards ahead of A.

In the field events the scorer adds the number of feet or inches that the handicapper allowed each athlete to the record that he makes in the present meet. For example: In the broad jump A's previous record was 24 feet and B's 23. The handicapper allows B one foot which is added to what he now does, so that if A now jumps only 23 feet 9 inches and B jumps 23 feet B wins by 3 inches.

Unknown athletes and those who have no records are usually placed on "scratch" (no handicaps allowed) so as to avoid the possibility of "throwing the event" to a stranger. The handicapper should do all in his power to find out the present condition of each contestant and judge accordingly. In filling out his entry blank each athlete must give his record in the last three meets, but he may not have competed for so long

a time that it might be unfair to him to judge him on those previous records.

It is customary to publish the handicaps in the issue of the newspaper just preceding a meet and, of course, they must appear on the printed program.

An official handicapper is appointed for each district for a year and is paid for his work from the entry fees. It is not an enviable job, for in spite of his best judgment the losers almost invariably blame him for their losses. For this reason handicap meets are not so desirable as "scratch" events. With the previously mentioned classified events before him a director can select types of meets that will avoid the difficulties, work, and expense of handicap meets.

WOMEN'S ATHLETICS AND SPORTS

In the growth of the modern athletic movement women's athletics have not been neglected.

Twenty years ago Vassar and Bryn Mawr colleges introduced track and field athletics modeled after the events used in men's colleges. This innovation was not approved among physical educators but the movement slowly spread to other women's colleges and prep schools until today such events are in much favor. Authorities close to the movement claim that experience has shown that if there is an initial medical examination and as careful training as in men's athletics that there are no harmful results and are even beneficial. But it is necessary to have a carefully selected list of events.

The committee in charge of this classify the events into junior and senior and advise the schools and colleges that have had little or no athletic experience to begin with the junior events. Below is a list of the standard events:

Junior Events: 50-yard dash, 75-yard dash, 60-yard four 2-foot hurdles, standing broad jump, running broad jump, running hop, step and jump, baseball throw, basketball throw.

Senior Events: 50-yard dash, 100-yard dash, 100-yard eight 2½-foot hurdles, standing broad jump, running broad jump, running high jump, running hop, step and jump, 8-pound shot, baseball throw, basketball throw.

The throws are all done from an eight foot circle. Hurdles, first one 5 yards, the others 10 yards apart. Spiked shoes and crouch start advocated in races. Great care should be used in making a soft jumping pit.

The increased interest in women's athletics is seen from the fact that in 1922 an International Federation of Women's Athletics was organized in Paris for the purpose of holding international events. The first events were held during the summer in 1922. The National Intercollegiate

and Interscholastic Women's Track Athletic Association was organized here April, 1922, to control women's sports in schools and colleges. It is associated with the International Federation. Its first meet was held in the fall of 1922. The American Physical Education Association has a committee to study the subject and the A. A. U. at its 1922 meeting decided to control open competition for women and has held annual championships for women since that time. The A. P. E. A. committee disapproves of open competition by women.

A careful study has been made by Miss Elizabeth Burchenal, inspector of athletics in the New York public schools, of the proper sports and athletics for girls that anyone who has to do with the conduct of girls should consider. The following is taken from her article in the handbook of the Girls' Public School Athletic League of New York:

For the Mature Girl

Condemned events: Pole vault, broad jumps, high jump (in contest).

Doubtful: Running high jump, weight throwing, running more than 100 yards in contests.

Approved: Archery, ball throw, basketball, climbing, coasting, dancing, field hockey, horseback, indoor ball low hurdles (not over two feet), paddling, rowing, skating, swimming, walking, running (not in contests).

Especially suitable and beneficial: Folk dancing, paddling, rowing, running, swimming, walking.

Best loved by the girls: Dancing, swimming, basketball, tennis, climbing.

For the Immature Girl

Condemned: Pole vault, weight throwing, running in contests more than 100 yards.

Doubtful: Field hockey, basketball.

Approved: Archery, ball throw, high and broad jump not in contests, climbing, dancing, horseback (cross saddle), low hurdles, paddling, rowing, running (not in severe contests), skating, swimming, tennis, walking.

Especially suitable and beneficial: Climbing, dancing, moderate jumping (not in contests), running in moderation, skating, swimming, walking.

Best loved: Dancing, basket ball, jumping rope, running games, swinging, swimming, tennis, climbing.

Another group of leading physical educators after careful thought decided that the best sports for girls of the junior and senior high school ages in the order of their value are, hiking, swimming, tennis, soft baseball, volley ball, girl's basketball, golf, field hockey, bowling, center ball, 50-yard dash, and hurdle racing.

Those who wish to form a sane idea of this much discussed subject will do well to consider carefully the resolutions that were adopted by the leading authoritative body, the committee on women's athletics of the American Physical Education Association, April, 1923. They state that the greatest evil is not that it is bad physically for women to compete in athletics, if there is proper training and selection of events, but there is decided objection to developing women athletic stars for the purpose of displaying their athletic prowess before a curious public. The resolutions are:

1. That women's athletics be protected from exploitation for the enjoyment of spectators or for athletic reputation.
2. That the enjoyment of sport and the development of sportsmanship be stressed by all promoters.
3. That individual accomplishment and winning of championships be minimized.
4. Select only such activities as can be participated in by all.
5. That competent women be put in charge of women's athletics at once, both the teaching and administering functions.
6. The motivation of competitors should be play for play's sake. To this end prizes should have the least intrinsic value.
7. All publicity should stress the sport and not individual or group competition.
8. That inter-school or inter-institution competition is warranted only as approved by this committee, and every girl in them actively participates in a full season of activities conducted by properly trained women instructors for purely educational values.
9. In all women's competition there must be required a medical examination, no gate money, admission only by invitation, no publicity except that which stresses the sport only and not the individual or the group that competes.
10. Competition for girls under high school age is questionable.
11. It is undesirable for women athletes to travel away from their home town to compete.
12. That there be a limited number of games.

The report of this committee giving a list of the approved events according to age and type of institution is published in a guide book by the American Sports Publication Co. (45 Rose St., N. Y.)

Note:—The national standardizing agency for women's and girls' athletics is the Women's Division, N. A. A. F., 2 West 46th Street, New York. There is an official handbook published.

CHAPTER X

SCORING METHODS

The Five-Three-One Method

To determine the relative standing of the athletes in a meet and to decide club winners, an arbitrary method of scoring has long been in use. It consists in giving five points for the winner of each event, three for second, and one for third.

The only exception to this is in dual relay races, in which the winning team gets eight points and the losers get nothing.

The Three-Two-One Method

To get a closer scoring this method is used by some where only three places are given.

The Intercollegiate Method

In intercollegiate track and field meets the winner of each event gets 5 points, second 4, third 3, fourth 2, and fifth 1. The college that wins a plurality (not majority) of the points wins the meet.

In cross-country runs 1 point is given to the first, 2 to the second, 3 to the third, etc., until all have crossed the tape, but the points of only the first five of each team count in determining the standing of the team. The team that has the least number of points is the winner.

The Percentage Method

The above methods although convenient are not just in determining relative ability of athletes and teams. It is manifestly unfair to give 40 per cent difference between first and second or second and third places when their records are only a slight fraction different.

To grade athletes more carefully the percentage method was devised by Dr. Luther H. Gulick in 1890 for the Pentathlon. The Y. M. C. A. adopted this method of scoring for all athletic events. In this system the record of each event is taken as the 100 per cent mark and a very low record as 0, and each fraction between these two extremes is given its relative per cent. Below is given an outline of the percentage system.

Y. M. C. A. Percentage Scoring

Events	Zero	100 Per Cent.	Points
50-yard dash.....	6 $\frac{1}{2}$ sec.	5 $\frac{1}{2}$ sec.	or 20 pts. for each $\frac{1}{8}$ sec.
75-yard dash.....	9 $\frac{1}{2}$ sec.	7 $\frac{1}{2}$ sec.	or 14 pts. for each $\frac{1}{8}$ sec.
100-yard dash.....	12 $\frac{1}{2}$ sec.	10 $\frac{1}{2}$ sec.	or 10 pts. for each $\frac{1}{8}$ sec.
150-yard dash.....	18 $\frac{1}{2}$ sec.	15 $\frac{1}{2}$ sec.	or 7 pts. for each $\frac{1}{8}$ sec.
200-yard dash.....	25 sec.	21 sec.	or 5 pts. for each $\frac{1}{8}$ sec.
300-yard dash.....	50 sec.	40 sec.	or 2 pts. for each $\frac{1}{8}$ sec.
440-yard dash.....	1 min. 13 sec.	53 sec.	or 1 pt. for each $\frac{1}{8}$ sec.
Half-mile run.....	2 min. 50 sec.	2 min.	or 2 pts. for each $\frac{1}{8}$ sec.
One-mile run.....	6 min. 40 sec.	5 min.	or 1 pt. for each $\frac{1}{8}$ sec.
Two-mile run.....	13 min. 50 sec.	10 min. 30 sec.	or 1 pt. for each 2 sec.
Five-mile run.....	40 min.	30 min.	or 1 pt. for each 6 sec.
120-yard hurdles.....	21 sec.	17 sec.	or 5 pts. for each $\frac{1}{8}$ sec.
220-yard hurdles.....	37 sec.	27 sec.	or 2 pts. for each $\frac{1}{8}$ sec.
$\frac{1}{4}$ -mile potato race.....	2 min.	1 min. 40 sec.	or 1 pt. for each $\frac{1}{8}$ sec.
12-pound shot.....	18 ft.	43 ft.	or 1 pt. for each 3 in.
16-pound shot.....	14 ft.	39 ft.	or 1 pt. for each 3 in.
12-pound hammer, no turn..	50 ft.	100 ft.	or 1 pt. for each 6 in.
12-pound hammer, with turn..	85 ft.	135 ft.	or 1 pt. for each 6 in.
16-pound hammer (turn)....	75 ft.	125 ft.	or 1 pt. for each 6 in.
Standing broad jump.....	6 ft.	10 ft. 2 in.	or 1 pt. for each $\frac{1}{2}$ in.
2 standing broad jumps.....	11 ft. 8 in.	20 ft.	or 1 pt. for each inch
3 standing broad jumps.....	17 ft.	33 ft. 8 in.	or 1 pt. for each 2 in.
Running broad jump.....	11 ft. 8 in.	20 ft.	or 1 pt. for each inch
Running high jump.....	3 ft. 6 in.	5 ft. 7 in.	or 1 pt. for each $\frac{1}{4}$ in.
Standing high jump.....	2 ft. 9 in.	4 ft. 10 in.	or 1 pt. for each $\frac{1}{4}$ in.
Pole vault.....	5 ft. 10 in.	10 ft.	or 1 pt. for each $\frac{1}{2}$ in.
Running high dive.....	3 ft. 9 in.	5 ft. 10 in.	or 1 pt. for each $\frac{1}{4}$ in.
18-foot rope climb.....	9 $\frac{3}{4}$ sec.	5 $\frac{3}{4}$ sec.	or 5 pts. for each $\frac{1}{8}$ sec.
Standing hop, step and jump..	21 ft. 8 in.	30 ft.	or 1 pt. for each inch
Running hop, step and jump..	24 ft.	40 ft. 8 in.	or 1 pt. for each 2 in.
Running high kick.....	4 ft. 10 in.	9 ft.	or 1 pt. for each $\frac{1}{2}$ in.
Running hitch and kick.....	4 ft. 7 in.	8 ft. 9 in.	or 1 pt. for each 2 in.
Double kick.....	3 ft.	6 ft.	or 1 pt. for each $\frac{1}{4}$ in.

For full detailed scoring tables of the percentage method see the Y. M. C. A. Athletic Handbook.

Recent Hexathlon tables are printed under separate cover at Y. M. C. A., 347 Madison Ave., New York.

The Percentage Increment Method

The Cook County Athletic Federation uses a modified percentage system that was devised by G. A. Sellar (called the Universal Scoring Plan). The distinctive feature of this plan is that the athlete gets an increasingly greater number of points for each inch or second the nearer he comes to the 100 per cent record mark, thus furnishing a greater stimulus to him to improve.

The Olympic Pentathlon

The Olympic Pentathlon scoring plan is given elsewhere. The Olympic Decathlon scoring tables and those of the A. A. U. All-Round Contest are found in the A. A. U. Handbook (Spalding's Athletic Library).

The following is a synopsis of the latter:

100-yard dash,				
9 $\frac{3}{8}$ sec.,	1000 pts.,	14 $\frac{1}{8}$ sec.,	34 pts.,	42 pts. for each $\frac{1}{8}$ sec.
16-pound shot,				
51 ft.,	1000 pts.,	18 $\frac{1}{2}$ ft.,	1.6 pts.,	30.72 pts. for each foot
Running high jump,				
6 ft. 7 $\frac{1}{8}$ in.,	1000 pts.,	4 ft. 1 in.	30 pts.,	4 pts. for each $\frac{1}{8}$ in.
Half-mile walk,				
3 min. 2 $\frac{3}{4}$ sec.,	1000 pts.,	6 min. 22 sec.,	2 pts.,	1 pt. for each $\frac{1}{8}$ sec.
16-pound hammer,				
189 ft. 6 $\frac{1}{2}$ in.,	1000 pts.,	66 ft.,	11.67 pts.,	8 pts. for each foot
Pole vault,				
13 ft. 2 $\frac{1}{4}$ in.,	1000 pts.,	7 ft. 1 in.,	3.8 pts.,	1.7 pts. for each $\frac{1}{8}$ in.
120-yard hurdles,				
14 $\frac{3}{8}$ sec.,	1000 pts.,	21 $\frac{1}{8}$ sec.,	10 pts.,	30 pts. for each $\frac{1}{8}$ in.
56-pound weight,				
40 ft. 6 $\frac{3}{8}$ in.,	1000 pts.,	13 ft.	8.87 pts.,	3 pts. for each inch
Run or jump,				
24 ft. 7 $\frac{1}{4}$ in.,	1000 pts.,	11 ft. 8 in.,	6.4 pts.,	8/10 pts. for each $\frac{1}{8}$ in.
Mile run,				
4 min. 12 $\frac{3}{8}$ sec.,	1000 pts.,	6 min. 58 sec.,	7.6 pts.,	1.2 pts. for each $\frac{1}{8}$ in.

The 1,000 Point Increment Scoring System

None of the scoring systems now in use are adaptable to all ages and abilities of athletes. For example, in the Y. M. C. A. tables 3 feet 8 inches is the lowest mark for which points are given in the running high jump. But there are few small boys who can jump that high.

To overcome this objection W. H. Ball devised the principles of a universal scoring system that was approved by the 1917 National Athletic Research Society conference. This provides for 1,000 points for the highest mark, which is to be beyond any of the best records. The lowest mark is at the starting mark, so that the athlete will get some points for even the lowest performance.

The point value increases as the 1,000-point mark is approached.

The scoring tables are being made by a special committee. The following will illustrate the increase of points in the running broad jump: As in all the other events the scoring begins with the lowest unit above zero. In this event the unit is one inch from zero up to 7 feet 4 inches, and from that mark to the maximum it is a half inch. The scoring begins at one inch where the scoring value is one point for each inch up to 13 feet 11 inches. From that mark up to 23 feet 6 inches the value increases to two points for each half inch. From 23 feet 6 $\frac{1}{2}$ inches up to the maximum (27 feet 9 inches) the value is three points for each half inch. Thus:

27 feet 9 inches	give	1000 points
" " 8 $\frac{1}{2}$ "	" "	997 "
" " 8 "	" "	994 "
" " 7 $\frac{1}{2}$ "	" "	991 " etc.

The world's record is 25 feet 3 inches, but the maximum is arbitrarily placed at ten per cent above the maximum in each event.

Team Scoring

Wherever scoring is required in team contests there is nothing simpler and better than to add the performance of each athlete in an event and compare with the other teams, but this can be used for only single events. It would be meaningless to add the total performances of a team in a run to that of a jump. In all team contests using the percentage scoring, the points (percentages) are added instead of the records.

Local Methods

Directors and managers may find it necessary to change the standard of scoring of any of the existing methods to meet local requirements. Directors have found the existing standards too high for boys and inexperienced athletes, thus giving them such low scores that they have become discouraged. It is better in such cases to give the highest 100 points and the lowest 50, then determine the others in relative proportion.

CHAPTER XI

NATIONAL ATHLETIC ADMINISTRATION

The National Athletic Association was the first governing body, having control of the 150 athletic clubs that were in existence during the decade beginning with 1870. This was superseded by the Amateur Athletic Union in 1888. Several organizations formed their own governing bodies to control their interclub contests. Among these were the Athletic League of the Y. M. C. A., the Intercollegiate Association, the North American Gymnastic Union, the National Cycle Association, the Amateur Fencers' League, the Federation of Motor Cyclists, the Catholic Athletic League, the International Skating Union.

These national bodies were all affiliated with the A. A. U., with representatives who had a voice in its management, called "allied members." They are governed, except the Y. M. C. A., by the A. A. U. rules in "open" meets and by their own rules when competing with each other, but none of these rules violate those of the A. A. U.

THE AMATEUR ATHLETIC UNION

The objective of the A. A. U. as stated in their handbook is:

1. To encourage systematic physical exercise and education.
2. To improve and promote sport.
3. To foster and promote athletic clubs.
4. To establish and maintain uniform tests and rules.
5. To institute and regulate and award amateur championships.
6. To promote national, state, and local legislation for public baths and athletic fields.
7. To maintain a bureau of athletic records.

There is a district division of states, each with officers. These are: the New England, the Metropolitan, the Middle Atlantic, the South Atlantic, the Central, the Southern, the Western, the Pacific, the Pacific Northwest, the Southern Pacific, the Rocky Mountain, the Inter-mountain, the Texas, the Hawaiian, Alleghany Mountain, Indiana-Kentucky, Niagara, Adirondack, Connecticut, Southeastern, Mid-Western, Ohio, Michigan, Florida, and Panama Canal Zone.

Each of these districts sends six delegates with one vote to the meetings of the A. A. U. where together with the four-delegate vote of the "allied members" a board of governors is elected whose duty is to direct

and govern its affairs, admit to membership, impose, enforce and remit penalties for violation, collect dues and funds, call meetings, locate, conduct, and manage amateur national championships, explain, define, and interpret the constitution and rules, and appoint committees.

This board is composed of one representative of each allied member, five delegates-at-large, all ex-presidents and secretaries, and three representatives from each active member (plus an additional representative if it has fourteen clubs, 2 for 29, three for 49, 4 for 74, 5 for 99, etc.)

A local commissioner is appointed for each city or athletic center, who temporarily acts for the board of governors in local matters.

The A. A. U. claims jurisdiction over basketball, gymnastics, track and field athletics, swimming, running of all kinds, walking races, tug-of-war, handball, boxing, and wrestling and women's athletics. It does not attempt to control amateur baseball, football, tennis, lacrosse, rowing, golf, archery, roque, or other team games not listed.

Each club that belongs to the A. A. U. must pay \$2.50 a year dues, and each individual must pay 25 cents a year to register. If an athlete does not belong to any club that is a member of the A. A. U. but who wishes to compete in their meets he may register "unattached."

If clubs not members of the A. A. U. wish to conduct a meet at which A. A. U. athletes are eligible, they must be governed by the A. A. U. rules, and must pay \$10 for a sanction to hold the meet. All of this business must be done with the local commissioner or the officers of the district in which the club is located, whose names may be learned at any newspaper office. (For more specific details see Athletic Rule-book of the A. A. U.)

Registration in the A. A. U.

An athlete who wishes to compete in A. A. U. contests must register with their Registration Committee or through the local Athletic Commissioner, who will furnish him with an application blank, which requires information concerning his athletic standing. This is acted upon by the District Registration Committee and if approved, the athlete is given a card that entitles him to compete in their contests for one year. If he changes residence to another district he must notify the committee.

Registration is not required to compete in contests in which members of only one club take part, but unregistered athletes who take part in even such closed meets cannot join and compete for another club within a year.

The Registration Committee may suspend athletes for unfair or ungentlemanly conduct, such as suppressing true figures from the handicapper, using obscene or profane language on track or field, or other act which tends to disturb or obstruct competition, or that violates the A. A. U. rules. In all such matters the Registration Committee is represented by the local athletic commissioner.

A. A. U. Amateur Definition

An amateur sportsman is one who engages in sport solely for the pleasure and the physical, mental, or social benefits he may derive therefrom and to whom sport is nothing more than an avocation.

He forfeits his right to compete as an amateur if he:

1. Participates in any competition or exhibition under an assumed name.
2. Is guilty of fraud or gross unsportsmanlike conduct in a meet or exhibition.
3. Directly or indirectly receives pay or financial benefit for participating in a public competition or exhibition.
4. Disposes of prizes for personal gain.
5. Receives financial benefit for coaching or teaching in any sport, unless it is merely an incident to his main employment.
6. Allows his name to be used to advertise athletic or sport goods.
7. Is employed in any business because of his athletic rather than his business ability.
8. Knowingly competes against ineligible persons without the consent of the organization governing the meet or of the National Registration Committee (or faculty authority, if he is a college student), unless the team he competed against represents a well-established organization, or unless it is in a generally recognized sport not governed by the A. A. U.

Reinstatement of Debarred Athletes

An athlete who has been debarred may be reinstated only under the following conditions:

1. He can never be reinstated if he violated sections 1 and 2 above.
2. If he violated 3 and 4 he may be reinstated at once, if (a) five years have elapsed and the violation was in a non-A. A. U. sport, and (b) he promises not to repeat.
3. If he violated 5 he may be reinstated if it was done only for men in U. S. service during the World War.
4. If he violated 6 and 7 he may be reinstated at once if he cease to violate and agree not to repeat it.
5. If he violated 8 he may be reinstated at once, if (a) done in a non-A. A. U. sport, (b) or if done in an A. A. U. sport one year before, (c) and he agree not to repeat it.

Conditions Under Which an Athlete May Compete in A. A. U. Meets

1. He must be an amateur according to the above definition and conditions.
2. He must be a registered athlete except (a) if he is a student in the U. S. military or naval academies and the officer in charge of athletics

certifies that he is an amateur according to the A. A. U. rules and is authorized to compete for the academy; (b) U. S. officers and enlisted men may without registration compete during war among each other or as teams even against professionals for non-money prizes, or they may individually represent their organization in open competition upon signing a certificate that they are amateurs according to the A. A. U. rules.

3. To compete here, foreign athletes must register with the national registration committee, and U. S. athletes who wish to compete abroad must obtain from them a permit at the request of the club of which he is a member.

4. He must be a member of the club he represents and not have competed for another club within a year, unless he changes residence to another district, or the club he belongs to disbands.

5. He must have lived in said territory four months.

6. He must wait four months after filing application to compete in the territory (six months to compete in the district championships).

7. He must have lived in the district six months to compete in district championships. If after six months' residence he resigns from the club he may still complete his year of eligibility to compete in that district.

8. Students attending educational institutions may represent either the institution or club or go unattached, but when they compete in A. A. U. meets they must register. The student may transfer his college registration to a club of the district of his actual residence between June 1 and October 1, or for a semester if he is not required to be in residence at college; but he must have been registered for such club three months before he can compete for it in junior championships, unless he was first registered with that club, in which case he may compete at once.

9. An athlete may compete in only one district championship a year.

10. Sections 4 to 8 (above) do not apply to educational institutions recognized by the A. A. U.

Disqualification

An athlete disqualifies himself from competing if,

1. He competes in unsanctioned meets, such as picnics.
2. Knowingly competes against disqualified athletes.
3. Being employed in any capacity by an athletic club.
4. Being expelled from his athletic club for unpaid dues until such dues are paid.

5. Receiving excessive expense money when competing away from home. The limit he may receive for actual car fare, single berth, meals, and room is \$7 a day. No traveling expense is allowed for trainer and no money is allowed for personal loss of wages where employed. Women athletes, however, are allowed a chaperon and additional expense money.

Upon returning home the athlete must at once make out for the regis-

tration committee a detailed list of expenses. If he fails to do so he is automatically suspended.

6. Allowing anyone but an officer of the club of his membership to register him in a meet.

Reinstatement of disqualified athletes may be granted by the governing board (two-thirds vote) only if the athlete has abstained from professional conduct for two years. No athlete who knowingly becomes a professional can be reinstated.

INTERCOLLEGIATE ASSOCIATION OF AMATEUR ATHLETES OF AMERICA

This association was organized among some of the colleges in 1876 to improve and control track and field sports among its members, and contests have been held annually since then. There are now thirty-nine colleges in the membership. Annual dues \$25.

Each college that joins must hold one track or field meet each year under I. A. A. A. rules. It may be a closed meet or with other colleges. Failure to do so calls for a \$25 fine.

Colleges desiring to compete in the annual meet must make application for membership sixty days before.

The I. A. A. A. is affiliated with the A. A. U. and is represented on their board by four members. Athletes competing in each other's meets are governed by the rules of the organization holding the meet.

The I. A. A. A. claims jurisdiction among its members only of track and field sports as follows: Running, walking, pole vaulting, shot put, throwing hammer, weights, javelin, discus and jumping.

The management is in the hands of an executive committee of six undergraduates elected annually. There is an advisory committee of five, with voice but no vote, that is formed as follows: The three colleges making the three highest scores in the annual field meet each select one member from among the faculty or the alumni. The president appoints the other two from other colleges and designates the chairman. Ex-members of the executive and advisory committees also have a voice but no vote.

The definition of an amateur, acts of disbarment, and pardoning power rules are similar to those of the A. A. U., but eligibility rules for competition in college sports are added in harmony with college conditions as follows:

1. Athletes dining at training tables must pay board for it equal to what it would cost them elsewhere.

2. Students entering college before February first cannot compete in the freshmen cross-country run (November), and they must have entered college before October fifteenth.

3. They must have studies equal in requirement for a degree.

4. They cannot compete if expelled, suspended, dropped to a lower class (unless due to war service), transferred to other studies on account of bad scholarship, or if they did not pass the entrance examination.

5. If a student has represented a college in any meet where two or more colleges competed and he won a first or second place in any event he cannot represent another college in the annual meets, until one year has elapsed and his scholastic standing be good.

6. Winners of first, second, and third places in any meet that was open to two or more organizations (except college and prep school meets) cannot represent another college within a year, and their scholastic standing then must be good.

7. Any student winning a place (1, 2, 3, 4, 5), in the annual meets cannot represent another college that has been a member of the I. A. A. A. for four years just before that time, until one year has elapsed, and his scholastic standing must be good.

Violation of the letter or spirit of the rules is cause for suspension or expulsion.

Three weeks before the annual meets names of contestants must be sent to the secretary accompanied by a statement by the manager and faculty member as to their eligibility.

Fifteen days before the meets a printed list of contestants must be sent to all colleges and if anyone is protested a hearing is arranged before the executive committee.

For more details see I. A. A. A. official hand-book.

Y. M. C. A. ATHLETIC ADMINISTRATION

The Y. M. National Council appoints the National Physical Education Committee of 28, the executive governing body for Association athletics in U. S.

That committee, in turn, appoints regional and state committees for jurisdiction in such areas. Local Associations who subscribe to the principles and rules of this National Committee are given eligibility certificates to compete in inter-Association events. These principles are, in substance:

1. The object of competition is to train competitors to express Christian ideals and to give health, joy and suitable recognition of accomplishment.

2. To develop leaders in Y and community activities.

3. To establish fraternal relations with other Associations and organizations with like purposes and objectives.

4. To adopt national rules for Y competition.

The spirit of Y. M. C. A. competition is shown in the following:

1. The rules of the games are to be regarded as mutual agreements, the spirit or letter of which one should no sooner try to evade or break than one would any other agreement between gentlemen. The stealing of an advantage in sport is to be regarded in the same way as stealing of any other kind.

2. Visiting teams are to be honored guests of the home team and their mutual relationships are to be governed accordingly.

3. No action is to be taken nor course of conduct pursued, which would seem ungentlemanly or dishonorable if known to one's opponents or the public.

4. No advantage is to be sought over others, except those of superior skill in playing.

5. Advantage should not be taken of the laxity of officials in interpreting and enforcing rules.

6. Officers and opponents are to be regarded and treated as honest in intention. When opponents are evidently not gentlemen and officers manifestly dishonest or incompetent, further relationships with them may be avoided.

7. Decisions of officials are to be abided by, even when they seem unfair.

8. Ungentlemanly or unfair means are not to be resorted to even when they are used by opponents.

9. Good points in others should be appreciated and suitably recognized.

Note:—It is the privilege and duty of every committeeman and person connected with the Association to embody these principles in his own actions and earnestly to advocate them to others.

We do not favor:

1. The placing of emphasis upon prize-giving or winning, and believe that these should be secondary and incidental.

2. Any form of commercialism, through bribes or special honoraria offered as inducement to compete or demanded by them.

3. The recruiting of athletes by one organization from another.

4. The high degree of specialization in athletics which interferes with the harmonious development of all the bodily functions.

5. The practice in competition which leads to excess and undue nervous expenditure, or which results in a state of mind not in keeping with true sportsmanship.

THE NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

This organization comprises about one hundred and seventy-five of the leading colleges and universities of the United States, and has a student membership of approximately two hundred thousand.

The Association is not a legislative or executive body, but educational

and advisory in its nature. It appoints, however, the committees that make the rules for most of the inter-collegiate sports, including football, basketball, swimming, track athletics, and wrestling, baseball, soccer, boxing, and seeks to get all college Associations and conferences to adopt them. Nearly all have adopted the track and field rules, which conform closely to the Olympic rules.

The Association was organized in 1905 and holds annual meetings during the Christmas holidays. Annual track and field meets were started in 1921.

The Association stands for the recognition of physical training as a part of the education of young men. Recognizing the importance of intercollegiate athletics in the program of physical education, the aim of the Association is to keep these games upon a high level of amateurism and good sportsmanship.

It recommends that each college faculty should make adequate provision in the hour schedule for physical training and athletics. That seasonal coaches, scouting (except at public intercollegiate contests), training tables, and organized training or coaching in the summer vacation are contrary to the spirit of amateur college athletics.

In furtherance of the first resolution, seasonal coaches should, as soon as practicable, be replaced by coaches appointed for the year, or should themselves be given an appointment for a year or more.

Through the activities of this Association the abuses that have crept into college athletics are being corrected.

The advisory function of the N. C. A. A. is shown by the following resolutions adopted at the 1922 annual meeting:

Resolved that this association urge upon member institutions and associate members:

1. The organization of sectional conferences.
2. That amateurism as defined by this association be taught and strictly adhered to.
3. The general adoption of the freshman rule.
4. That each conference adopt a strict rule against participation by migrants.
5. That participation be for a period of three years.
6. That participation be denied graduate students.
7. That playing on any team other than one representing his own institution, whether in term or vacation, be prohibited except by faculty consent and under strict supervision.
8. That the whole moral force of faculty and athletic organization be directed toward suppressing the betting evil.
9. Absolute faculty control.
10. That the district representatives make it an important part of their duty to visit the colleges of the district to advocate the principles of this association.

YALE-PRINCETON-HARVARD ATHLETIC AGREEMENT

Many practices have arisen in college athletics tending toward professionalism. To overcome them much has been done by conference rules and regulations. The latest and best means for accomplishing this seems to be in the agreement of the "big three" colleges which was recently entered into by the college authorities working in conjunction with the athletic councils of these institutions which went into effect January 1, 1923. The following are the rules agreed to:

To submit to a committee, composed of the chairmen of the athletic boards, debatable questions affecting athletic relations.

The eligibility committee of each college shall, before each competition, require of each contestant a detailed statement of his financial support or earnings and if he receives financial aid from others than those on whom he is naturally dependent. The committee in making decisions shall take into consideration the athlete's academic record in scholarship, his character, and his willingness to meet his obligations, and the motive of both the athlete and the donor.

No athlete who has ever received any pecuniary reward or equivalent in connection with athletics may compete for his college.

Awards of all scholarships, prizes, and loans made by the university must be approved by the duly authorized officer or committee and the details published in the catalog of the university.

Any student who transfers to any of these colleges from another college is ineligible to represent that college in any sport in which he represented the former college.

Proselyting in preparatory schools for promising athletes is disapproved. If such prospective student is paid part or all his expenses to visit the college except by those on whom he is naturally dependent that act debars him from representing that college in athletics.

Each college shall aim to have as coaches of all teams only those who are on the regular university staff (paid by the college), and no coach shall write for publication anything without first submitting it to the university authorities for approval.

In making schedules effort shall be made to arrange contests with only those teams representing institutions having similar standards of eligibility and training methods.

The matter of publicity shall be subject to constant supervision in the effort to lessen undue emphasis upon athletics in general and foot ball in particular (here five rules about foot ball are added which are not apropos to track and field).

THE AMATEUR ATHLETIC FEDERATION

There had been more or less friction between the A. A. U. and the Y. M. C. A. Athletic League and frequently threatened a rupture, which was finally decided upon by the Y. M. C. A. in 1911.

The break was hastened by the success of a new plan of control that was applied in Chicago in 1908, called the Cook County Amateur Athletic Federation, of which Dr. H. F. Kallenberg was the founder.

The distinctive feature of the A. A. F. is local rather than national control. National control was found too cumbersome and indirect. (The author claims to be the first to advocate local control in a paper read at the Physical Director's Conference in 1905, which paper was published in "Recreation" magazine, June, 1906.)

Since the break with the A. A. U. there have been many federations organized, including all of the organizations of a city, county, section, or state. Recently the national body was organized (see later).

The federation idea has the endorsement of the leading physical educators, who see in it the solution of many vexed athletic problems.

The characteristic features of the A. A. F. are:

1. It is an educational movement for the purpose of developing character through competition in gymnastics, athletics, and aquatics and also for the purpose of disseminating knowledge that will lead to physical, mental, and moral efficiency.

2. There is no such thing as a federation registration or sanction fee. Every athlete registers with his own organization. The various members of the Federation complete with each other without special sanction from a central body.

3. The Executive Committee is not a central governing body. Its function is education and promotion and not administration.

4. Each organization in the Federation is responsible for and controls its own members.

5. An athlete who is suspended by one organization cannot compete for another until he is reinstated by the organization that originally suspended him.

6. Athletes are not allowed to jump from one organization to another in the Federation.

7. The Federation deals with organizations and not with individual athletes. It does not recognize unattached athletes nor independent teams.

8. Any money that an organization in the Federation may raise in registration fees from its own members or from gate receipts, etc., is used to promote the athletic interest of that particular organization.

9. The Federation is a clearing house. It represents an agreement between the members to stand for the best things in athletics and to help each other to attain their ideals.

The success of local federations in various parts of the country has led to the necessity of a unifying national organization. Thus, on May 8, 1922, there was organized the National Amateur Athletic Federation of America the purpose of which is to seek to unite all of the existing governing bodies.

The purpose and plan is here given:

Mission

Its mission shall be to create and maintain in the United States a permanent organization, representative of amateur athletics and of organizations devoted thereto; to establish and maintain the highest ideals of Amateur Sport in the United States; to promote the development of physical education; to encourage the standardization of the rules of all amateur athletic games and competitions, and the participation of this country in the International Olympic Games.

In order to carry out its mission as outlined above, the Federation will seek to:

1. Unite all organizations of a permanent character which are national in scope, and which are actively interested in the promotion of amateur athletics and other forms of physical recreation.

2. Aid the constituent organizations of the Federation in their efforts to improve and place wholesome physical activities within the reach of all.

3. Study the best methods of furthering the development of the physical, social, and moral well-being of all classes of individuals through participation in wholesome physical activities.

4. Educate its constituency in particular, the public in general, regarding the function and value of physical activities when properly conducted.

5. Adopt, formulate, and publish principles, standards, and rules governing the games and events to be promoted.

6. Encourage all forms of amateur athletics and pastimes, and through the constituent organizations, or as a Federation, if the same is advisable, to promote and stimulate state, sectional and national championships.

7. Foster interest in the International Olympic Games and encourage the participation of representatives of the United States in these events.

Membership

The Federation shall consist of organizations of a permanent character which are national in scope, and actively interested in the promotion of amateur athletics and other forms of physical recreation.

The Board of Governors may admit other organizations, which are

definitely committed to an amateur basis, provided there is no organization already a member of the Federation through which they may be represented.

Government

Control is invested in a Board of Governors consisting of representatives elected by the constituent organizations.

There are two classes of membership: national organizations of large membership have four representatives and lesser ones, two. The Board may elect a number of members at large not to exceed one-half of the number of those representing the constituent organizations.

All constituent organizations of the Federation shall be held directly and fully responsible for the amateur standing and conduct of their representatives in athletic competitions in accordance with the hereinafter stated definition of an amateur, and the statement of "The Spirit of Amateurism."

Each organization in the Federation shall direct its own activities, conduct its own competitions, and control its own athletes in accordance with the principles set forth in the Constitution and By-laws of this Federation.

Any penalty imposed by any organization of the Federation on any of its members for any infraction of the principles set forth in its Constitution and By-laws shall be honored by every other organization in the Federation.

Definition of an Amateur

An amateur is one who engages in sport solely for the pleasure and the physical, mental, and social benefits he derives therefrom, and to whom sport is nothing more than an avocation.

Under this definition, individuals ineligible for amateur competition are those who have:

1. Taught or coached athletes for pay.
2. Competed under salary or for a fee.
3. Competed for a cash prize or for a staked bet.
4. Competed for or accepted inducements other than approved medals or trophies.
5. Competed for or accepted reimbursement exceeding actual expenses involved as a competitor.
6. Competed for or accepted any share of gate receipts.
7. Disposed of prizes for personal gain.
8. Competed under an assumed name.
9. Misrepresented facts regarding eligibility, ability, or performance.
10. Participated in any public competition or exhibition as an individual and not merely as a member of a team against one or more persons ineligible to compete as an amateur in the sport in which such participa-

tion occurred, without having obtained as a condition precedent special permission to do so from the organization governing such competition or exhibition, unless it is the general practice or custom in such sport for such character of competition or exhibition to take place.

11. Promoted amateur contests for personal gain.

12. Been a party to any attempt to induce an amateur to dishonorably violate his standing as an amateur, and have not had ineligibility removed by competent authority.

The Spirit of Amateurism

The spirit of amateurism carried with it all that is included in the definition of an amateur and much more. It stands for a high sense of honor, fair play, and courtesy on the part of the participants, hosts, guests, officials, and spectators. It stoops to no petty technicalities to twist or avoid the rules or to take an unfair advantage of opponents.

It implies a recognition of the marked influence of athletics in developing organic vigor, physical fitness, intellectual efficiency, moral qualities, and social habits. It seeks to increase their value by exalting the standards of all sport.

It is opposed to all practices which are harmful to individual or to amateur athletics in general. It recognizes the need of wise organization and supervision of athletics and cooperation in making these efficient.

The Federation is without doubt based upon the highest and sanest principles yet formulated, for a national unifying agency. Its success will depend entirely upon proper administration. If its distinctive principles of high idealism and local autonomy are not drowned by the tidal wave of spectacular competition it will prove to be the best nation-wide athletic movement yet devised.

Information of the Federation may be obtained at its headquarters, 20 Broad Street, New York.

General Palmer E. Pierce summarized the difference between the N. A. A. F. and the A. A. U. as follows:

"The main difference between the regulations of the Amateur Athletic Union and those of the National Amateur Athletic Federation is in the method of control of amateur sports. Both organizations have the same definition of an amateur. The A. A. U. claims jurisdiction over about a dozen sports, and does not permit participation in open competition except under its sanction and regulation. It requires registration under its own system of all athletes who participate in these open events.

"The Federation does not seek to control, except through its members. In such meets as are held under its auspices the certificates of all members as to the eligibility of the participants will be accepted. In all likelihood if the Amateur Athletic Union should join the Federation, it would be given the duty of conducting and directing the national competitions in track and field events, provided it would accept the certificates of the

other members of the Federation as to eligibility of their representatives. Unattached athletes would, of course, have to register just as under present conditions."

The National Amateur Athletic Federation of America held its first annual meeting December 29, 1922. It is rather difficult to explain to followers of athletics just what this body is and what it stands for. In brief, it bears the same relation to national athletics of every kind that the National Collegiate Athletic Association bears to American inter-collegiate sports.

Both these organizations are comparative newcomers in the field of supervision and conduct of competitive and recreational activities. The N. C. A. A. has existed for seventeen years, but it has been only within the last few seasons that it has changed from a deliberative and advisory body to an administrative and executive organization. The N. A. A. F., as the new national organization is called, hopes to affiliate all the national sports organizations with itself, and thus to exercise a guiding, if not controlling, interest in the development of the future of athletics in the United States.

This movement has the backing of the United States army, the navy and the International Y. M. C. A. Some seventeen national associations connected partly or entirely with sports have already joined the N. A. A. F. including the United States Lawn Tennis Association, the United States Golf Association, the Boy and Girl Scouts movements, the N. C. A. A. and the Y. M. H. A.

However, three great bodies that are not yet within this fold are the I. C. A. A. A. A., the Knights of Columbus and the A. A. U. Unless these organizations join with the N. A. A. F. it is doubtful that the new body will ever be able to exercise the functions for which it has been formed.

At this meeting the following committees were appointed:

Athletic surveys, physical standards and tests, rules, mass activities, competitive championships, athletic education, athletic legislation, industrial recreation, collateral relations.

The Old and the New Athletic Administration Contrasted

The following tabulation is made from a comparison by Fisher:

In control and authority

The old is,

Autocratic.
Centralized.
Restrictive and repressive.

Legalistic.

Allied members must deal with "Central" to get sanction to compete with each other.

Inflexible law for all classes and conditions.

The new is,

Democratic.
Diffused in the allied bodies.
Promotive, progressive, expressive, and educational.

Honor system.

Allied members deal directly with each other.

Adapts rules to ages and different grades of participants.

TRACK AND FIELD ATHLETICS

Concerning their attitude toward sport:

Athletics are segregated in athletic clubs.	Athletics are merged into educational, social, and religious organizations.
Emphasis is upon building up athletics.	Emphasis is upon building up the character and power of the athlete.

Concerning their attitude toward the athlete:

Stresses specialization.	Stresses all-round ability and sport for everyone.
Emphasizes expert performance.	Emphasizes fun (good time) through recreation.
Makes the athlete responsible for infractions.	Makes the organization he represents responsible.

THE AMERICAN OLYMPIC ASSOCIATION

In 1911 the American Olympic Committee was organized to select American athletes to compete at the Olympic games and take them there. November 25, 1921, the permanent American Olympic Association was organized to continue this work. It is a senate of members representing various independent organizations and will for that reason include a variety of athletic ideals and methods.

The A. O. A. has nothing to do with promoting national sports but everything to do with American representation at the Olympic games, such as prescribing standards, conducting try-outs, taking the American athletes to the Olympic meets, being responsible for their conduct, and raising expense money.

Formerly the A. A. U. controlled this organization, but recently a basis of representation has been effected so that all of the athletic interests of the country, including both the A. A. U. and the N. A. A. F., are united in its management, which will ensure a more complete participation by American athletes in the great world games.

THE INTERNATIONAL AMATEUR ATHLETIC FEDERATION

is composed of representative governing bodies of several nations. The A. A. U. is the American member of this body.

CHAPTER XII

HISTORICAL NOTES

Organized track and field athletics are not a modern invention. The golden age of athletics coincided with the golden age of ancient Greece. However much we may desire to boast of our great athletic interest today, we cannot compare with those days of the original Olympic games.

The early legends of Greece are full of references to contests in running, wrestling and boxing.

The famous Olympic games were organized in 776 B.C. and officials records were kept of the winners from that date to A.D. 217.

Athletics were considered so important in those days that from the third century B.C. the Greeks reckoned time by the Olympic games.

The contests varied some in different localities but they had standard events in national games that did not change for centuries. They had two sprints and a long run. The first sprint was "one stade" (a straight-away of 200 yards, the length of the stadium). The next was a "two-stade" run. The long run was 24 stades (about 3 miles). The field events were the standing and running long jumps (with weights), discus throw, javelin throw, boxing and wrestling.

The famous pentathlon (all-round five athletic events) was a two stade run, running long jump, discus throw, javelin throw, and wrestling.

In those days athletics were amateur and the best classes of society—professional men, business men, and rulers participated in them. But in the fifth century B.C. (440 to 338 B.C.) specialization made rapid progress in the hands of professional trainers and this naturally led to professionalism in competition. From that time athletes spent their entire time in preparing for and competing in sports because the rewards were so great. The winners thereafter were supported at public expense, statues were made of them, and they were otherwise honored as great men.

This overemphasis led to the decline of athletics during the fourth century B.C. "Within a century of the glorious 76th Olympiad that celebrated the freedom of Greece, we find a class of useless athletes, an unathletic nation of spectators, and a corrupt and degraded sport" (Gardner). Yet the influence and popularity of these sports continued for several centuries, but principally as spectacles. Emphasis was placed upon prize fighting and wrestling with all their professional corruption.

In spite of this decay there was an increase of construction of gymnasiums and stadiums, the gift of wealthy citizens or princes, but these became more centers of education and philosophy than of athletics.

When, in the second century B.C. the Romans conquered Greece, they found athletics corrupt and left them so. They recognized the value of athletic training to develop warriors but principally their contests were spectacular arena combats. Athletics never held the lofty place among the Romans that they did among the Greeks. True, Greek athletes were transplanted to Rome, and in 80 B.C. Sulla transferred the whole Olympic festival to Rome, but this influence was only short-lived.

Julius Caesar provided the populace not only with dramatic and musical performances but also with circuses, athletic performances, a sea fight and gladiatorial contests.

It is curious to note that a union of professional athletes grew up under the Romans and was sanctioned by the emperors.

In the second century A.D. there was a revival of Greek athletic games fostered by the Roman emperors, who built gymnasiums and stadiums widely. They attracted wide attention but the Greeks had by that time become physically, morally and politically degenerate.

By this time athletics had degenerated so that such great men as Plutarch, Galen and Philostratus condemned them. They had lost the early ideal that "the culture of the body and mind went hand in hand and was a duty that every man owed to the state."

The last Olympic records were in A.D. 217. After that both Romans and Greeks were kept so busy defending themselves from the barbarians of the North that they had no time for sports.

By that time too, Christianity had conquered Rome and the Christians were naturally against the evil influences as they saw them, since they knew that these ancient festivals represented the stronghold of paganism. The early Christian emperors dismantled the structures and abolished the heathen customs.

If Christianity had arisen during the golden days of Greece it would not have opposed them, because there has always existed a close relation between religion and athletics. The earliest games were held as a part of religious funeral services. Gardner says, "Whatever the origin of funeral games there is no doubt that they account adequately for the close connection between athletics and religion." The Christians opposed them because they were a part of the pagan religions. The professional athletic union mentioned above was a sacred guild. Gardner says further that "the religious character of these guilds is a curious survival of the immemorial connection between religion and athletics."

Whether it is a case of cycles in history or the manifest failure of trying to oppose a natural law, medieval Europe had its rigid system of training in athletics in developing a knight, whereas the modern Christian Church in its Y. M. and Y. W. C. A. movements has appropriated the ancient Greek ideal ("a strong mind in a strong body governed by a fair soul") in its own slogan, "body, mind and spirit," and as a result it has become the greatest athletic organization in existence.

No ecclesiastical mandate or any amount of preaching can long disregard a natural law, and physical play is as natural as eating, and quite as important. Among all nations at all times there has been some form of play but the present practice and events of athletic sports can be traced in the history of England for the last four hundred years. (Cf. Shearman's "History of Athletic Sports.")

Shearman quotes Sir Thomas Eliot, knight, who in the Middle Ages wrote a manual for educating a gentleman in which he mentions weight throwing, lifting, tennis and exercises listed by Galen.

In Barclay's Eclogue (1508) appears a poem showing how common athletic sports were among the people:

"I can both hurl and sling,
I run and wrestle, I can throw the bar,
No shepherd throweth the axletree so far,
If I were merry I could well leap and spring."

Athletics seem to have been more popular and constant with the common people not only at that time but thereafter. The annual football match between the shoemakers and drapers were superseded by foot-racing championships. A hundred years before Shakespeare the common people were fond of athletics.

In Queen Elizabeth's day the gentle class held pageants, dramatics, and bull-baiting, but the common people held fairs in the churchyards on Sundays and among the sports were contests in jumping and weight-throwing.

The chief amusements of Edward II were weight-lifting, leaping, running, tilting, and dancing.

Edward III forbade athletics so that archery might not fall into disuse as a war measure.

Henry VIII approved of athletics. His secretary advised noblemen's sons "to pursue sports and leave study and learning to the children of the meaner people." But the reverse took place.

Because athletic contests were held in the churchyards on Sundays while religious services were being held, the Puritans were antagonized and in 1577 railed against "tennis, bowls, and such like fooleries." When the Puritans came into power in 1622 they disapproved of hammer-throwing and wrestling, but permitted horseback riding.

King James I encouraged running, leaping, wrestling, fencing, dancing, catch, tennis, archery, pall mall, and field games, but not hammer-throwing (probably because of its danger to spectators). He issued a "Book of Sports" in 1617 in which it is stated that he permitted certain sports after church. When Charles I republished this book it was one of the chief counts brought against him by the Puritans, who were then coming into power.

When the Puritans were thrown out of power in 1660, athletics again became prominent. The Duke of Monmouth "mingled in every rustic sport, wrestled, played quarter-staff, and won foot-races in his boots against fleet runners in shoes." Professional racing soon developed. A good runner was given an easy job, such as footman, and at these races their masters bet on the results.

At the beginning of the eighteenth century, athletics were again considered "low," but continued to be held at fairs, wakes, and so on, among the common people. In that period variety sports developed, such as climbing the greased pole.

Then again a little later there was a change of sentiment. From 1817 to 1826 Major Mason of Necton organized yearly contests in his section. These were in running, jumping, sack-racing, blindfold wheelbarrow-racing, wrestling, spinning and whistling; but there were no other variety features.

It is plain to see that through all these changes the common people kept athletic sports alive.

During the last half of the eighteenth century distance-running and walking were the chief sports among the aristocracy. These were amateur and were stimulated through the records of "a gentleman," Foster Powell, who held the long distance record for 25 years. Some of his records were: 50 miles in 7 hours, 402 miles in 5 days 18 hours, 112 miles in 24 hours.

Another gentlemanly athlete, Captain Barclay Allardice from 1796 to 1808 helped in this revival. His famous performance is 1,000 miles in 1,000 hours.

From 1825 to 1850 amateur pedestrianism was overthrown by professionalism. Then the gentry took up general athletic games again.

It has been true from the very beginning of Grecian athletics that the "best people" would start contests, and they would be popular for a while, then everyone would try them, professionals would be developed, the best people would drop out, and after a few years of unsatisfactory professionalism they would start some other line of athletics.

The recent revival of athletics had its beginning in 1850 when college athletics sprang up "to overcome overpressure of sedentary life among students." In 1849 the Royal Military Academy started organized athletic events, but discontinued them in 1853.

In 1850 Exeter College, Oxford, began the yearly events which have been held ever since. Cambridge started in 1857, and other schools and colleges followed.

Outside of college circles the first modern open amateur races were held in 1862. In 1863 the Mincing Athletic Club of London was organized and by 1866 most large towns in England had athletic clubs, since which there has been a rapid growth of athletic interest throughout the entire English-speaking world.

The first governing body for athletics in England was the Amateur Athletic Club, started in 1866, but it failed. April 24, 1880, the present Amateur Athletic Association was organized at Oxford. Under its jurisdiction there are over 200 clubs and more than 1,000 contests are held every year in the United Kingdom.

In England the "open championships" are held the last Saturday of July, the Irish and Scotch a little earlier. The standard events are the 100-yard dash, 440-yard dash, 120-yard hurdles, long jump, high jump, 16-pound shot, 16-pound hammer, mile run, half-mile run, 4-mile run, pole vault, 2-mile steeplechase, 4-mile walk. A 10-mile run is held in the spring after the paper-chasing season.

In English universities the two winter terms are devoted to track and field athletics, closing with a big meet at Easter. The events are the same as the above without the last five events, but a 3-mile run is added.

Shearman states that jumping and weight events are practiced more in Ireland and Scotland than in England where running is more popular.

Organized athletics in America developed later than in England, which has been our model. The Olympic Athletic Club of San Francisco, California, was the first to hold meets here. The date of the first one was May 5, 1860. Strange to say, these meets were limited to field events (no running).

The earliest combined track and field meets here were held "somewhere in Jersey" in 1863, near New York, the place and promoters are not known.

The New York Athletic Club was organized September 8, 1863, and held its first meet, indoors on November 11. This club was the greatest factor in the early promotion of athletics. The moving spirit was Wm. B. Curtis, who was the first in the U. S. to use spiked shoes in races, copied after the English.

The N. Y. A. C. promoted the first national championship meet in 1876. Two meets that were held in 1878 so stimulated athletic interest here that in 1883 there were 150 athletic clubs in the U. S. Then there followed a period of neglect until the Amateur Athletic Union was organized, January 28, 1888. Before this (1879) there was a union of athletic clubs, called the National Athletic Association, which was not a success; after the A. A. U. held many more successful meets the N. A. A. merged with it.

The first American college meet was held as a side-show to the big boat-races at Saratoga, N. Y. early in the seventies. This was followed by the organization of athletic associations at Harvard and Yale.

The Intercollegiate Amateur Athletic Association of America was organized in 1876, from which time annual events have been held with ever-growing interest.

The modern international Olympic meets were started through an organization, the International Olympic Association begun June 23,

1894, the prime mover being a Frenchman, Baron Pierre de Coubertin. Olympic games have been held every four years since then, except 1916, as follows: Athens, 1896; Paris, 1900; St. Louis, Mo., 1904; London, 1908; Stockholm, 1912; Belgium, 1920. The 1916 meet was scheduled for Berlin but for obvious reasons was not held.

The Athletic League of North America was organized in 1896. It affiliated with the A. A. U., but, because of dissatisfaction it withdrew in 1911, since which time it has been the chief promoter of athletics for the masses rather than for a few expert athletes. It was in charge of the athletic interests of the American, French, and Italian armies in France and did a remarkable service.

The first Athletic Federation of local athletic clubs was started in 1908 in Chicago for Cook County.

The National Amateur Athletic Federation of America was organized May 8, 1922.

The International Federation of Women's Athletics was organized and held its first meet in 1922.

Athletics have been promoted by Americans (chiefly through the Y. M. C. A.), in the Orient. They have been extensive enough to develop into the Far Eastern Athletic Association with representation in Japan, China, the Philippine Islands, Siam, and the Malay States. The first meet was held at Manila in 1913. Athletes came from Japan and China besides the Philippines. This meet was won by the Islanders. The next was held in 1916 in Shanghai and was won by the Chinese. The third was held at Tokyo in 1917 and was won by the Japanese. The interest in these meets is shown by the number of athletes that were represented in the Tokyo meet from the different countries; China 90; Philippines 100, and Japan 140. The fourth meet was held in 1919, again at Manila, and again the home athletes won. The fifth meet was held in Japan, 1923, and was won by the Japanese.

An athletic movement similar to the Far Eastern A. A. has just recently (November, 1922) been organized in South and Central America called the Latin American Athletic Federation. Five hundred athletes from Argentina, Brazil, Chili, Paraguay and Uruguay participated at the first games held in connection with the recent Brazil Centennial Celebration. It is the result of cooperation of the International Olympic Committee and the Y. M. C. A.'s. in the I. O. C. world movement.

Athletics are slowly taking their place as an important factor in national development and international comity. Two countries have recently appointed an athletic member in their cabinets (Italy and France).

BIBLIOGRAPHY

The list of books and articles on athletics is extensive. A few of the best ones are given here, which are among those consulted by the author in writing this book:

Greek Athletic Sports and Games—Gardner.
Track Athletics in Detail (1896)—Harpers.
Track and Field Athletics—Graham and Clark.
Training—M. C. Murphy.
Theory and Practice of Athletics—Hjertberg.
Athletic Games—Bancroft and Pulvermacher.
Cook County Athletic Federation Handbook.
History of Athletics in England—Spearman.
Track Athletics Up to Date—Clark.

From the Spalding Athletic Library, the following:

Athletic Primer—J. E. Sullivan.

College Athletics—M. C. Murphy.

Handbook of these athletic bodies; A. A. U., Y. M. C. A., I. A. A. A., Public
School A. C., N. C. A. A., Women's Athletics, Athletic Almanac (records).

THE END

INDEX

	PAGE		PAGE
Addresses.....	76	Construction, broad jump pit.....	41
A. A. F. administration.....	137	circle for weights.....	31
A. A. U. administration.....	128	cross-bars.....	30
events.....	97	discus.....	53
scoring.....	124	field.....	18
Administration bodies.....	128	56-pound weight.....	49
Advice to athletes.....	4	finish tape.....	14
Ailments, what to do for.....	70	hammer.....	47
All-round meets.....	109-113	high jump pit and standards.....	38
All-round high school meets.....	103	hurdles.....	22
A. L. N. A. administration.....	133	indoor track.....	28
events.....	97	javelin.....	51
Amateur definition.....	130, 139	kicking pan.....	64
American Olympic Assoc.....	142	potato race boxes.....	26
American style, discus.....	52	relay stick.....	24
Announcer.....	80	ring.....	61
Army efficiency test.....	96	shot.....	45
Athletic fraternity.....	95	sprint buffer.....	28
Athletics and health.....	3	track.....	11, 16
Attendants.....	81	vaulting pole.....	58
		vaulting rope.....	58
Badge tests.....	85-87	Contrast of governing bodies.....	141
Bibliography.....	149	Course in races.....	13
Boy Scouts' test.....	93	Cramps, how to treat.....	71
Boys' hexathlon.....	115	Cross-bars and pegs.....	30, 38
Broad jump, technic and rules.....	39	Cuts, how to treat.....	70
Brown's School tests.....	101, 103		
Bruises.....	70	Decathlon.....	113
Buffer for indoor sprints.....	28	Diet for athletes.....	68
Burdick's tests.....	91	Direction of running.....	11
		Discus construction.....	53
Championship meets.....	97	Discus throwing.....	51
Circle construction.....	31	Dislocations, how to treat.....	71
Classified championships.....	101, 108	Disqualification of athletes.....	131
Clean sport principles.....	5	Distance running.....	9
Clerk of the course.....	12	Double kick.....	63
Closed meets.....	76	Draper's simplified test.....	104
Colds, how to treat.....	72	Dress of athletes.....	68
College athletic tests.....	94	Dual meets.....	77
Competitors, rules for.....	81	Duties of the coach.....	73
Conditions for competing.....	130		
Constipation, how to treat.....	31	Efficiency athletic tests.....	90, 91
Contests, kinds of.....	97		

	PAGE		PAGE
Feet, sore, how to treat.....	70	Kicking events.....	62
Fence vault.....	59	Lay-out high jump.....	35
Field construction.....	18	Long distance running.....	9
Field events rules.....	30	Management of meets.....	76
Field judges.....	30	Massage.....	74
Fifty-six pound weight.....	48	Mass athletics.....	117
Finish rules and judges.....	30	Medicine ball hurl.....	54
Fouls in running.....	14	Meets classified.....	119
Fraternity, athletic.....	95	Merit-badge test.....	93
Games committee.....	79	N. A. A. F. administration.....	137
Girls' athletics.....	122	N. C. A. A. administration.....	134
Girls' badge test.....	87	New York state athletics.....	168
Greek style discus.....	51	N. Y. P. S. athletic tests.....	85
Habits for athletes.....	68	Officials of meets.....	77
Hammer construction.....	47	Olympic pentathlon.....	112, 125
Hammer throw.....	45	Open meets.....	77
Handicap meets.....	120	Pegs for jump stands.....	37
Harvard oarsmen, health of.....	3	Pendulum timer.....	9
Health of athletes.....	3	Pentathlon.....	110-112
Heat exhaustion, treatment.....	71	Percentage increment scoring.....	125, 126
Heats in sprinting.....	12	Percentage scoring.....	124
Hexathlon.....	114	Philadelphia school tests.....	90
High kick.....	62, 63	Pioneers' tests.....	93
High school athletics.....	103	Playground athletic tests.....	86
Historical notes.....	143	Pole vault.....	55
Hook high jump.....	35	Potato races.....	26
Hop-over high jump.....	35	Press stewards.....	82
Hop, step, and jump.....	40	Prizes.....	83
Hurdle construction.....	22	Promoters' hints.....	73, 75
Hurdle race rules.....	19	Protests.....	81
Hurling medicine ball.....	54	Public school events.....	99
I. A. A. A. administration.....	132	Records.....	82
events in meets.....	98	Referee's duties.....	12, 14, 15, 79
scoring.....	124	Registration, A. A. U.....	129
Implements.....	81	Reilly's classification.....	116
Indoor track events.....	24	Reinstatement of athletes.....	130
Indoor jump equipment.....	41	Relay races.....	22, 25, 27
sprint buffer.....	28	Ring vault.....	61
sprint start cleats.....	28	Rope vault.....	58
vaulting events.....	58	Roll-over high jump.....	32, 34
weight events.....	54	Rub-down.....	68
Indoor jumping.....	41	Running high jump.....	33
Injuries.....	70	Rules in meets, fence vault.....	60
Inspectors.....	12	56-pound weight.....	49
Itch of crotch.....	71	general.....	79
Javelin throw.....	50	general field.....	30
Judges at finish.....	14	hammer.....	47
Judges of walking.....	14	hurdling.....	21
Jumping equipment.....	38	javelin.....	50
Jumping events and rules.....	32		

INDEX

153

	PAGE		PAGE
Rules in meets, pole vault.....	57	Team scoring.....	127
relay races.....	22	Technic of events.....	6
rope vault.....	59	Tests, various.....	85
running broad jump.....	14	Thousand point scoring.....	126
running high jump.....	37	Ties in field events.....	31
shot put.....	44	Ties in track events.....	15
standing high jump.....	32	Timekeepers.....	15
track.....	11	Timing devices.....	18
Rural school athletics.....	101	Toe blocks.....	42
School athletic tests.....	86, 90	Track construction.....	16
Scissors high jump.....	32, 35, 37	Track events and rules.....	6, 11
Scissors kick.....	62	Track measurements.....	11, 28
Scoring methods.....	124	Training, in general.....	67
Shot put.....	43	for hammer throw.....	47
Shoot high jump.....	34, 35	for high jumps.....	38
Sideache, treatment.....	71	for hurdling.....	21
Shot, construction.....	45	for pole vault.....	56
Simplified boys' meet.....	114	for relays.....	23
Shuttle potato race.....	26	for shot put.....	45
Snap under bar.....	65	for sprints.....	8
Sprains, treatment.....	70	Undesirable events.....	66
Sprinting technic, rules.....	6	Value of competition.....	1
Sprints, training for.....	8	Vaulting events.....	55
Stadium potato races.....	26	Wegener's pendulum timer.....	19
Standing hop, step, jump.....	40	Weight events.....	30
Start rules, running.....	12	Weight reduced.....	72
Step-over high jump.....	36	Women's athletics.....	121
Starter's duties.....	12	Work-out.....	67
Stecher's school tests.....	90	Yale athletes' health.....	4
Stretch kick.....	64	Yale-Princeton-Harvard agreement..	136
Surveyor, duties.....	80	Y. M. C. A. athletics.....	133
Team contests.....	114, 116	events.....	97

